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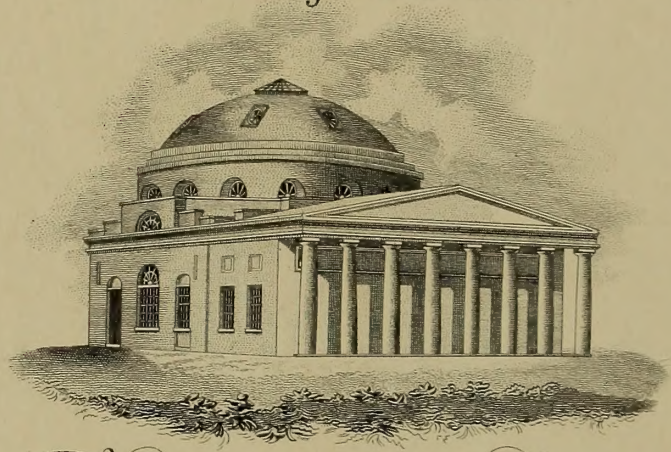

University of Maryland

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

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UNIVERSITY OF MARYLAND

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1872 (b)

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[1] Noteworthy color illustration on title page. Bound out of order.
[2] Title page inserted in previous thesis (Scarlatina).

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1851-1892; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

Author	Title
Pacetti, Louis B.	Yellow Fever
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UNIVERSITY OF MARYLAND

THESES

1872 (b)

Parker, M. C. (Marshall)	Acute Articular Rheumatism	23p.
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Watson, A. G. (Arthur)	Asthma	47p.
Hubard, J. E. (John)	Rubeola	14p.
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Sellman, W. A. B.	Scarlatina	40p.
McKenzie, A. H. (Alexander)	Acute Lobar Pneumonitis	24p.
Hyatt, Frank (Franck)	Acute Lobar Pneumonia	21p.
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Stone, I. S. (Isaac)	Hydrocele	30p.
Clawson, J. H.	Scarlet Fever	23p.
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Brawner, J. B. (John)	Hydrate of Chloral	17p.
Legette, E. M. B.	The Physician and His Duties	12p.

1 - Noteworthy title page, color

1872

An Inaugural Dissertation on

Acute Articular Rheumatism,

Respectfully Submitted to the

examination of the

Dean and Faculty

of the University of Maryland by

Marshall C. Parker, of

South Carolina.

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Acute Articular Rheumatism

Symptoms and Course

Acute articular rheumatism involves an inflation of the joints or articulations. Fever invariably attends this form of the disease and some say it precedes the inflamation, but if such be the case it is rare. The primary symptoms are generally local. In the majority of cases they show themselves in the extremities and usually first in the lower. The disease may confine itself to one joint only, but very often several are affected either simultaneously or in quick succession. The lining membranes of the joints are inflamed, but rarely lead to exudation of lymph or to suppuration.

The inflammatory condition may disappear in a short time, perhaps in a few hours though this is not usually the case. Sometimes the disease begins with a feeling of uneasiness or stiffness in the part. In other instances violent pain is the first symptom, Heat and swelling soon follow, and the parts remain painful till they become tumified, when the pain somewhat abates. External sources remain however, and the slightest movement causes suffering. The swelling is usually tense and elastic and the surface often reddened with a slight rose color gradually shading off into that of the healthy skin, but in many cases the unnatural color does

not exist. Commencing in one part the inflamation quickly extends to another, as from the ankle to the knee, or from the ankle and knee on one side to the corresponding joints on the other side Sometimes in ilo fingers it attacks neighboring parts, Sometimes distant parts in Succession, and often disappearing in one joint often fixing itself in another. The swelling of the diseased joint does not immediately subside with the pain, but usually becomes softer and instead of being firm and elastic will often pit somewhat on pressure, A joint may be attacked several times before the disease ends, The disease may be confined to the ligaments of the joints, or may

also attack the Synovial membrane.
When the ligaments alone are attacked
the Swelling is firm and elastic, but
if the Synovial membrane be also in-
volved, the swelling is soft and fluctu-
ating, This is in consequence of the syno-
vial Secretion, Swelling is usually great-
est in the joints least protected by mus-
cles, In some cases of articular Rheu-
matism the suffering is very intense
the slightest movement, or the least
jar or pressure causes so much suffering
that the patient does not dare to change
his position, and dreads the approach
of anyone to his bed, Very soon after the
local seizure, rigors and other symptoms
of commencing fever are experienced

the pulse is increased in frequency, the tongue becomes furred, the appetite is impaired or lost the patient often complains of thirst, and then is occasionally headache, The fever is almost always of the ethmic character and generally of a violence proportionate to that of the local affection though not invariably so. The pulse is usually full and strong and generally not very frequent, varying from ninety to one hundred and ten, Respiration is not sensibly disturbed as long as the disease confines itself to external parts. The surface though warm is less heated than in most other fevers and is often moist Sometimes bathed in copious sweats which has a peculiar sour

and sickening smell, and has no effect in relieving the inflamation and pain, Nausea and vomiting are seldom present, The bowels are generally constipated and often obstinately so.
The secretions are little diminished with the exception of urine, which is scanty and high colored, The brain is rarely affected though it may be and delirium may be a prominent symptom, The fever is usually remittent in character with exacerbations in evening, which are often accompanied with an increase of pains These are generally worse at night and relax somewhat with the fever in the morning, The disease may run its course without penetrating any of the great cavities.

But often either by a simple extension or by a metastasis of the inflammatory action, various internal organs become affected and the case very seriously complicated. The most frequent of these complications is inflamation of the lining or investing membranes of the heart, constituting endocarditis or pericarditis. These complications occur most frequently in the advanced stage of the disease, but may occur at any period. Endocarditis occurs much more frequently than pericarditis, and when the latter does occur it is generally accompanied by the former.

Next to the lining membrane of the heart, the pleura is probably the most frequent seat

of internal rheumatic inflammation. This
is though in most cases seems to be an
extension of the cardiac disease, or at
least to occur simultaneously with it.
There is reason to believe that the lungs
themselves are occasionally attacked
with rheumatic inflamation causing
a variety of pneumonia. The brain and
peritoneum may also be affected. All these
inflamations are less severe in their
character, and yield more readily to
the remedies employed for their relief,
than ordinary inflamations of the
same parts. The duration of acute rheu-
matism is uncertain. It may be only
a few days or may continue for months.
Some swelling and soreness is apt to remain

a considerable time after the violence of the disease has passed, and weakness and stiffness of the joints and muscles, are frequently left, after convalescence has long been established. In some cases the fever does not cease with the obvious inflamation, being kept up partially by some lurking affection of some internal organ. On the contrary more or less local disease is not unfrequently left after the fever is gone and the acute degenerates into chronic rheumatism.

Pathological Characters

The blood abounds in fibrin, as much as ten parts to the thousand has been found by some pathologists; the normal

quantity being two parts to the thousand. It is only during the existence of malpain and fever that the excess of fibrin is so striking. The view held by most pathologists now, is that there is a morbid principle in the blood and many among whom is our distinguished Prof. of the practice of Medicine, believe this morbid principle to be lactic acid. Whatever the morbid principle may be it is doubtless an intrinsic production; that is it is not received from without the body. The pathological essence of the disease underlies the production of this principle, and so long as the production goes on the cause of the disease continues and the disease

ends when the principle is no longer produced. The principle circulating with the blood acts upon certain parts and gives rise to the certain local Symptoms or rather manifestations of the disease; and in its actions upon parts it shows an election for the fibrous tissues and especially upon those entering into the composition of joints.

Causation

Rheumatism is attributed especially to the action of cold on the surface of the body. Moisture increases its effect but probably only by serving as a more rapid conductor than dry air. Sleeping in damp sheets or upon

damp ground, exposure to cold rains with-
out subsequent change of dress and sit-
ting in a cold damp room are exam-
ples of exposures that are apt to be followed
by the disease. It is most prevalent in
changeable climates, and in the Spring
of the year. But there must be some-
thing more than cold present to bring
on rheumatism. It is not always those
most exposed to cold &c. that suffer
most from rheumatism. There must
also be a peculiar state of the system
predisposing to this form of disease.
There must be a rheumatic diathesis.
In what this diathesis consists has
not been discovered. It may be con-
genital or inherited or probably it may

hereditary. Statistics establish conclusively the hereditary transmission of the disease, and it is a matter of common observation to see members of the same family suffering with it. Age has a decided influence in the causation. It rarely attacks under ten years but may occur in infancy. The age at which persons are most liable to the disease is between fifteen and thirty years. If a person has not experienced one or more attacks before the age of thirty, the liability of the disease diminishes and becomes quite small at fifty. Males are more liable to this disease than females, and persons once affected

are more liable to the disease than those who have never been affected. When it occurs in the old it is almost always those who have been affected in early life.

Diagnosis.

The diseases with which rheumatism is most liable to be confounded are, gout, rheumatic gout and arthritis. The differential diagnosis between acute rheumatism and gout can be made as follows. Gout always shows a preference for the smaller joints, the most common seat being in the metatarso phalangeal joint of the great toe. Rheumatism, on the other hand shows a preference

for the larger joints the principle of which have already been named).
In acute cases of gout the pain is greater than in acute rheumatism, tenderness is also greater in gout and the pain occurs in paroxysms or marked exacerbations. In gout ordinem pruritus, desquamation of the cuticle and enlargement of the veins, are distinctive signs.
Febrile movements are less marked in gout, than acute rheumatism, and the fever is also apparently Symptomatic, while in rheumatism it is apparently essential. In gout uric acid is found in excess in the blood, while in rheumatism lactic acid is found in

excess. Gout occurs rarely under the age of puberty, but chiefly from thirty to sixty; rheumatism occurs most frequently from fifteen to thirty, and often attacks the young. Gout most frequently attacks the plethoric and highly fed, while almost the reverse is true of rheumatism.

The disease under consideration may be distinguished from rheumatic gout by the absence of the essential rheumatic fever, by absence of abundant perspiration, of cardiac complications, by the fixedness of the arthritic affections in the joints primarily attacked, and the tendency to become chronic. In rheumatic gout there is

also a peculiar distortion of the fingers to the ulnar side of the hand.
In rheumatic gout there is no liability to pericardial and endocardial complications.

Acute rheumatism and acute arthritis are also liable to be confounded but the following points enable us to make the differential diagnosis.
First the fixedness of the inflammation from the first to a single joint in the latter disease whereas in rheumatism it is rare that the mobility of the disease is not to some extent manifested, The existence of a fever in some cases of rheumatism prior to the affection of the joint. The longer duration of the local affection

not rheumatic. The rapid disappearance of the local affection often in cases of rheumatism, and the speedy recovery of the use of the affected joint. The disappearance and recovery being more slow in cases not rheumatic.

Prognosis

The disease under consideration is not often fatal; the immediate danger to life is exceedingly small. When death does take place it is due to complications, including under this head endocarditis and pericarditis. In all cases of complications there is more or less danger to life, but many and in fact most cases end

in recovery.

Treatment.

The treatment of this disease has during the last quarter of a century undergone great change. Bleeding both general and local, mercurialization, colchicum, nitrate of potassa large doses of quinia, and the use of nitrohydrochloric acid, have all been tried and although it was once thought that each of them had influence over the disease, most of them have now fallen into disuse. Of late years great reliance is placed in the alkaline treatment.

The alkalies most employed are the bicarbonate of soda, bicarbonate of potassa

and the tartrate of Soda and potas-
sa. It is claimed for the alkalies
treatment, efficiently pursued, the
power of lessening the febrile move-
ments, relieving the arthritic infla
mation, abridging the duration of
the disease, and preventing endocar
ditis and pericarditis. Dr Miller States
that in treating 174 cases with alka
lies, not a single heart complica
tion ensued after the patient had
been twenty four hours under treat=
ment. In order to secure as quickly
as possible the protective agency of
the alkalies, they must be given
at once and in large quantities,
or doses, gr xx of the bicarbonate of Soda

may be given every hour or two hours until the urine gives an alkaline reaction; as soon as this effect is produced the quantity may be much diminished, the dose being repeated only two or three times in twenty four hours. To secure more diuretic effects than is produced by the alkaline remedy alone, the acetate, nitrate or tartrate of potassa or acetate of ammonia or colchicum may be added.

The alkaline treatment does not preclude the use of other therapeutical measures, which are to be employed with reference to the indications in individual cases

Bleeding is admissible only when the patient is plethoric and the febrile movements intense, Continual purging is never indicated. Opiates often afford much relief and should be given at all times when required. They are especially indicated and are best given in many instances in the form of dover's powder, Lemon juice may be allowed. Tonics are often useful, the preparations of cinchona being among the best. The diet should be nutritious and as much should be allowed as the stomach can digest. A moderate quantity of wine or spirits is sometimes useful

Having bought the system under the effects of the alkalin treatment and maintaining its effects, it is an object to preserve and restore the vital force.

The affected joints, claim local measures of treatment. They should be covered with cotton batting, saturated with a Solution containing Tincture of Opium, Bicarbonate Soda, and water, and should then be covered with an oil silk bandage. The soap and opium liniment is a good local application. Many other local applications has been recommended but the above is now considered about the best but in the choice of local

application, the Sensation of the patient may often serve as a guide. Extension of the limb by means of an apparatus for that purpose has been tried and in some cases found to afford marked relief. Rheumatic patients should be instructed to warm flannel next the skin.

Much more might be said upon the treatment of this disease, but having named those remedies which I believe to be the best, I now respectfully submit what I have said to the criticism of the Dean and Faculty of the Medical University of Maryland, hoping that if I have committed errors that they will pardon me.

AN

INAUGURAL DISSERTATION

ON

SCARLATINA.

SUBMITTED

TO THE

PROVOST, REGENTS

AND

FACULTY

OF THE

UNIVERSITY OF MD.

FOR THE DEGREE OF

M.D.

BY

H. CLINTON McSHERRY.

To Prof. Wm. D. Howard,

To whose excellent teachings I am largely indebted for the knowledge of the disease treated of in the following pages. Is dedicated this thesis, as a slight token of appreciation

H. Clinton McSherry

Scarlatina

This disease stands most prominent among the affections of childhood both on account of its frequency, and as it is the mortality, which in the severer cases is exceedingly great

It is a contagious and epidemic, exanthematous fever, characterized by scarlet rash, and great heat of skin, frequency of pulse, and more or less inflammation of the mucous membrane of the mouth and fauces.

Authors usually speak of three varieties viz. 1st Scarlatina simplex. The mildest form in which there is but little fever and the

throat is slightly, if at all affect-
ed.

2nd Scarlatina Anginosa. A severer form. In which all the symptoms are increased and sore throat is always present.

3rd Scarlatina Maligna. The name indicates is a most terrible form of the disease. It is recognized by the very great inflammation of the throat, which is usually accompanied by cerebral disturbance.

Though some authors speak of Scarlatina Simplex as without any throat affection, I believe that most pathologists agree that

there is no scarlatina without implication of the throat.

The best division of the disease and that which appears now to be generally adopted is into the mild and severe forms.

Although it was not until the latter part of the last century that this was recognized as a distinct disease, having previously been confounded with measles and other exanthemes, still the poison the source of the disease has been readily traced to Arabia whence it has spread over the entire world.

Causes. It has been clearly proved to be infectious by the number of cases

of spontaneous evacuation, and it has also been shown that it occurs in persons who have been so isolated as not it to have been impossible for them to have come in contact with the disease, which indicates that it must also have an epidemic influence.

The poison is thought to be of a material nature, and it is admitted into the system through the usual channels, the skin, mucous membrane of the stomach and respiration. It appears to be principally contained in the skin or its secretions, and the mucous membrane of the fauces, from which its injections

influence is felt. It is most common under seven years of age, and is rare after childhood. One attack is supposed to give exemption from future attacks though rarely a person may have it a second or even a third time, indeed some physicians say that they never attend a case of this disease without having a slight sore throat with fever.

Stage of Invasion. There may be a prodromic stage, but in the mild form the onset is more commonly sudden and generally comes on at night, the child may wake up with vomiting or nausea, shiverings, some fever, heat of skin, frontal headache and great thirst of the

throat be now examined, there may be seen a slight efflorescence of the mucous membrane.

Eruptive Stage. On the morning of the same day, or more commonly on the second day, the scarlet rash is seen in minute dark red points on a rosy blush, in clusters of variable sizes and shapes. This usually appears first upon the face and neck and gradually spreads over the entire body, it increases in intensity until the third or fourth day when it reaches its acme, it may remain for a day or two and then begins to decline.

In some cases the eruption does not diffuse itself over the entire body, and some

rarecases have the eruption upon the
back alone, but it invariably does not
in any case indicate the severity of
the attack. The redness of the eruption is
more vivid where the skin is delicate
as upon the back, inner surfaces of
the limbs, and flexures of joints.
If the nail of the finger be drawn
over the eruption a white line remains
for a short time. This was thought
to be pathognomonic of scarlet fever
but it seems not to be peculiar to this
affection as it occurs in other erup-
tive diseases. On pressing the hand
over the body the rash generally
appears to be perfectly smooth, though
sometimes there may be small elevated

papular, which are miliary vesicles.
These run up and form small scales.
Upon the appearance of the eruption
there is no diminution in the severity
of any of the symptoms. The pulse
is full & strong, and sometimes dicrotic, and
there is no other disease in which
it is so frequent averaging from
120 to 150 beats per minute. The heat
of the skin is also intense say from
101° to 102° though it is rarely higher
than 106°, generally it is dry but
in some cases may be bathed in
perspiration throughout the attack.
Dizziness is frequently present, as
is anorexia, digestion varies, usually
there is constipation, vomiting is not

commonly troublesome. Respiration is generally easy and not disturbed. The urine is of high color, urea not increased, and the chlorides and phosphoric acid diminished. Albumen is found only in small number of cases during the eruptive stage. The eyes are injected. The appearance of the tongue is certainly the most pathognomonic symptom of the attack, at first it has a whitish or yellowish white fur upon it, with its edges red and glossy. After a time the papillæ project through the fur, giving it them a resemblance to strawberries, from which the name "Strawberry

tongue" is denied. During the eruption,
round the 3rd or 4th day, this fur clears
off and the tongue is left red, and
sometimes like raw beef.

The throat, pharynx,
and tonsils, are red and tumefied,
and the submaxillary and lymphatic
glands are tumid, rendering swallowing
difficult and painful, but the
throat affection is seldom severe
enough to be dangerous in the
mild form of Scarlatina. Gangrena-
mau occur but is rare, sometimes
the patient complains of earache
which is followed by otorrhoea.
The nervous system also appears
to be deranged for there is irritability,

insomnia, and sometimes delirium.
Stage of Decline. As I have already
stated the eruption reaches its
height, about the 3rd or 4th day,
remains a day or two and by 5th or
6th day begins to decline, leaving
scales small flakes, patches, & moulds.
All the symptoms now begin to decline,
the fever diminishes, the tongue cleans
off, and the inflammation of throat
subsides.

In some very mild cases
desquamation is completed as soon
as the 4th or 5th day, but it does not
disappear until the 10th or 12th day
usually, and may last for several
weeks. It is accompanied by

great irritability and itching of skin. Albumanuria is more apt to occur in this than in the eruptive stage. Mild cases are still more frequent than the severe, either form may cause the other in an other person. Sometimes the attack is of such a mild character that no treatment is necessary.

Severe Form. This form of the disease includes most of those spoken of by authors as Scarlatina Anginosa and Scarlatina Maligna.

The onset is sudden and violent in some cases, and the child is prostrated from the begining. Nervous symptoms appear immediately,

care has taken but then it is probably owing to spandemia. It is advisable that the patient should be confined to the house one month from the onset of the attack.
In the mild cases very little treatment is necessary. If the stomach be loaded with improper food an emetic will do good say ℞ Ipecac. grx, alumenis ʒi. m. Mild laxatives do good, as magnesia, castor oil & rhubarb, but purging is injurious.
A diaphoretic may now be given, a neutral mixture, nitrate of Potass. ʒiij, water ℥iv and a few drops of sweet spirits of nitre may be added, or wine of antimony gtt. iij, sweet spts.

of nitre gtt viij m.

The tincture of the chloride of Iron is very useful both generally, and locally upon the angina and it is also said to prevent albumenuria or dropsy.

If the pulse be very frequent and the skin extremely hot and dry, give a warm bath or sponge the body with vinegar and water, then wrap the child up warm and put to bed. This treatment is all that is necessary in the mild cases, and if the hygiene is properly attended to the patient will most likely get well.

Treatment of Grave Cases. Laxatives may be given with care as in the mild

cases. The salts of soda & magnesia have been recommended as antiseptics, to prevent the fermentative action of scarlatina poison. The hyposulphites are preferred, in doses of a grain for each year of childs age, three or four times a day.

Inunctions do good when the skin is hot, dry, and irritable. The german physicians use fat bacon which has a piece of the rind attached, with which they rub the entire body several times a day, but in this country some more elegant preperation is preferred as ℞ Glycerinae ℥i, Ungt. aquae Rosae ℥j ℳ. When the fever is very high Veratrum Viridi may be given, with

good effect.

Hot baths are always very useful. Cold baths are also recommended, but I think that there are very few cases in which they would not be injurious, they should certainly never be used in asthenic cases. When the pulse is full and strong and the skin dry and hot they may sometimes be used to advantage, but even then it is better that the water should be tepid or moderately warm.

Mustard foot bath and application of cold to head are good when there is a tendency to delirium.

For Angina when severe, touching with a solution of nitrate of silver gr x-3j.

or tincture of the chloride of iron with six parts of water or ℞ acid muriatic ʒi, mel. Rosae ℥i m. Permanganate of Potash and alum are also used. As before stated Chlorate of Potash are good locally as well as generally. Sometimes stimulants are required from the begining in some cases wine whey will do but generally milk punch is preferable. Tonics are also useful, among the best of which is Huxam's tincture of bark.

When dropsy occurs as a sequelae special treatment for it will be required. Warm baths several times a day should be employed, hot vapor baths are frequently used with good result.

these are conveniently obtained by placing an india rubber tube over the spout of a kettle of hot water, and then introducing it under the bed coverings, or by placing to the feet hot bricks wrapped in wet cloths.

Diaphoretics, purgatives, and diuretics, are all often useful for the former tartar emetic in small doses and for the latter cream of tartar ʒj three times a day, will have the desired effect. Mercury in the form of blue pill is a good purgative. Digitalis may be used as a diuretic in combination with sweet spt. of nitre. Dry cups over the loins often have marked good effect. General bloodletting is not

advisable but sometimes bleeding over the Kidneys affords relief

In uraemic convulsions when persistent the inhalation of chloroform will often give speedy relief general bleeding is also recommended

With the above summary of the treatment, closes our account of a disease, the fatality of which is certainly exceedingly great, but though we lose many cases, we must not be disheartened but strive on, attending faithfully to those cases which may come under our care, and comforting ourselves with the knowledge that though many die, we are often rewarded with success.

AN

Inaugural Dissertation

ON

A Sthma

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

[illegible] G. Martin

Of

Accomac Co. Virginia

Session of *1871-2*

but the principal force of the disease seems to be expended upon the throat.

Child seems to bed to all appearances perfectly well, during the night wakes up with violent vomiting and purging or convulsions, and in the morning the rash may appear. Pulse is very frequent and rapidly increases from 120 to 180 beats per minute. Skin at times dry and exceedingly hot, and again it may be cool or even cold, or it may vary, being cold in one place and hot in another. The inflammation of the throat is very severe, the tonsils are swollen and may be ulcerated, and deglutition becomes almost impossible. About the 3rd or 4th day there

may be noticed a false membrane of fibrinous consistency, which appears first as whitish or yellowish spots upon the soft palate and tonsils, and gradually spreads over the entire fauces, and may extend to the larynx, this is a very grave complication and may be recognized by the croupy cough which accompanies it. Ulcerations form beneath this membrane sometimes, and it is apt to cause fetid breath. It occurs in a succession of crops, that is it remains for a time after its appearance, disappears, and then reappears again. The breathing now becomes laboured and difficult, and indeed the severity of

all the symptoms is usually, but fortunate to the extent of the false membrane. The glands of the neck are very much swollen and inflammed There is delerium very often from the beginning and as the disease progresses the patient gradually becomes comatose.

Death occurs in this form sometimes in 24 hours or less from the onset of the attack, but if the patient lasts, about the 3rd or 4th day the symptoms appear to abate, and occasionally the improvement is continued and the patient may finally get well, but in the majority of the cases, this abatement of

symptoms only lasts for a short time, and then they begin again with renewed severity, and the patient dies about the 8th or 9th day.

Coryza is seldom present, there is sometimes a scanty discharge from the nose. Inflammation of ear and otorrhoea may be present.

Duration of the attack is exceedingly variable. Some cases may die in 24 hours without any eruption appearing, from the severity of Scarlatina poison or Scarlatina toxaemia, or other cases may last for some days or even weeks, and then may die worn out, or some may even then, after a terrible attack, recover

Sequelae. The common opinion seems to be, that if a child be well nursed and not exposed there will be no sequelae, but this is not always the case, for these sequelae are thought to be due to the action of one of the scarlatina poison which may remain in the system.

Among the other bad effects, the patient is liable to various forms of scrofula, boils, ulcers, enlargement of glands, abscesses of the neck, and ophthalmia tarsi. Permanent deafness may result from the inflammation of the fauces extending along the eustachian tubes and causing ulceration and perforation

of the tympanum, a chronic discharge from the ear is established, the small bones of the ear, and indeed the petrous portion of temporal bone itself may become necrosed, and there may even be formed as a result an abscess of the brain. Cerebral abscess may give rise to epilepsy. Just after desquamation, inflammation and swelling of the joints may be noticed, resembling very much an acute attack of rheumatism. Singular to say this as well as the next of the sequelae to be noticed occurs often the mild cases, much more frequently than after the severe. Perhaps the most frequent and serious sequence of this disease is

dropsy. This is first noticed about 20 days from the onset of the attack, and is thought to be due to exposure to cold though it may be caused by anaemia. The poison which is being eliminated by the skin, is irritated when patient is exposed to cold, and is then thrown upon the kidneys for elimination, these organs being overwhelmed by the poison, desquamative nephritis is set up. It may first be noticed by puffiness under the eyes, of the face, and general anasarca may follow. Encephalus may occur or more commonly effusions into the lungs or abdomen. On examination the urine is found to be of low specific gravity,

and to contain albumen, tubecasts, and epithelium cells, sometimes there is haematuria. When there is no albumen present in the urine exposure to cold is not apt to cause Bright's disease, but dropsy then be caused by anaemia. When patient dies with dropsy Kidneys are found to ~~contain~~ be enlarged and congested. the tubules contain epithelium cells or a granular matter the result of their disintegration, the Malpighian bodies, are congested, and owing to the prevention of escape of blood distended

Anatomical Characters. In many cases no lesions are found of such importance as to indicate the cause of death.

Very frequently the eruption disappears entirely after death. There may be more or less congestion of different parts of the body and inflammation of the intestinal canal. The proportion of the fibrin of the blood is normal or slightly increased, the globules are also increased. The increase of the fibrin is supposed to occasion the fibrinous deposits which are sometimes found in the cavity of the heart, and occasionally cause death. There are no lesions entirely peculiar to Scarlatina.

Diagnosis The principal affections with which Scarlatina may be confounded are Measles and Roseola. In scarlatina the eruption usually appears in two days and often in less time. In measles

it does not appear until the 5th day or later. The eruption of scarlet fever consists of numerous little points whilst that of measles occurs in cresentic patches. In measles the rash spreads slowly and rarely appears upon the hands and feet, whereas in scarlet fever it spreads with great rapidity over the entire body. The color of the eruption is different being darker in measles. Coryza and bronchitis are rare in scarlatina and are nearly always present in measles. The strawberry tongue, great frequency of pulse, and heat of skin of scarlet fever. Desquamation is different, the cuticle being thrown off in scarlatina in flakes or patches of large size, and

measles like flakes of fine bran.

By far the most difficult diagnosis is that between mild cases of scarlatina and roseola. The eruption is very much alike, except the difference of time, that of scarlatina being earlier. The eruption does not make its appearance first upon the face and neck and thence spread over the entire body, but appears in different parts of the body, disappears and may then reappear again, and there is no desquamation, the duration of the attack is much shorter. If there be difficulty in distinguishing the affection during the attack the sequelae may be a means of diagnosis. Dropsy occurring very frequently after

scarlet fever, especially after mild cases, and being rarely a sequence of measles. Scarlatina may also be confounded with diphtheria or even small pox, but the similarity is hardly sufficiently marked to be noticed.

Prognosis. In this disease the prognosis is proverbially uncertain. In the mild form it is not usually fatal, and on the contrary the severe cases are exceedingly so, but it varies also according to the epidemic prevailing. It is best never to be too sanguine, nor should all hope of any case be given up.

Dr. Gregory thinks that ~~from~~ the 60th

hour of the 3rd day is the period of the greatest danger, but very often the throat affections occur with the greatest severity after that time.

In this case death is supposed to occur from fibrinous deposit in the right side of the heart.

The absence of cerebral symptoms, and the usual course of the disease is favorable. So is normal condition of the urine. Death from a second attack is said to be unknown.

If pregnant or puerperal women be attacked it is nearly sure to prove fatal, for this reason it would appear to be better not to protect infants children so carefully from this disease, and

indeed that both males and females should take their chances whilst young as it is much more fatal to adults than children

Treatment. In all cases hygienic measures are very important, patient should be kept in a large airey room with a temperature in winter of about 65° or 70°. attention should be paid to the diet which should be light and easily digestible. During the desquamative stage the patient should be carefully protected from exposure to cold; as dropsy is very apt to result from such exposure, though sometimes it does not, and it may occur also in the cases in which most

Asthma.

Asthma is a Greek word denoting laborious breathing. Difficulty of breathing, recurring at intervals, accompanied with a wheezing sound and sense of constriction in the chest, cough and expectoration. It is a disease of considerable interest; - and is rendered more so, to an enquiring mind, in consequence of the conflicting opinions of different writers respecting its pathology and treatment.

While some consider it purely symptomatic, or, as depending in every case upon some organic lesion, others think it may depend upon spasm, and be entirely unconnected with any lesion, or, morbid anatomy.

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The term Asthma should be applied to all diseases which are connected with difficult respiration, under the common title of Asthma. The Medicine, who are often versed in pathological anatomy, have correctly separated those diseases of the heart and large arteries which give rise to symptoms resembling Asthma, from the true disease. Asthma should be limited to one pathological condition, viz: obstruction of the minute bronchial tubes from spasmodic contraction of the muscular fibres which constitute a part of the tubes.

This will exclude any disease connected with the heart or any affection which does not involve spasm of

ing tubes of the small bronchial tubes. Asthma has been confounded with Emphysema, and some writers still regard them as the same disease, - but, although often associated, they are distinct diseases, and each may exist without the other.

Vesicular Emphysema denotes, particularly, a pulmonary lesion; - viz: dilatation of the air-cells, or coalescence and enlargement - resulting from destruction of the septa.

Asthma, being a neuropathic affection, does not necessarily involve any appreciable lesion. It seldom has anatomical characters, although in a great many cases pulmonary lesions are found in post mortem

examinations. Those which belong to Chronic Bronchitis and emphysema are not unfrequently found, thus showing the frequent co-existence of these affections with the disease in question.

Asthma occurs in Paroxysms, with intervals of variable duration; hence it belongs to the diseases which exemplify the principle of periodicity. These Paroxysms may, or may not, come on with premonitory Symptoms. The ~~Symptoms~~ are, more or less, always present, but are often provoked by external causes.

Patients who are subject to the disease can often tell when an attack is coming on by a sense of

premonitions. Sometimes by excitement of the mind, and by other peculiar sensations which are very hard to describe.

A Paroxysm is at times an hour or two coming on, and runs a much longer period than this may be required for its full development; or the attack may be sudden and quickly over. It occurs most often at night - the latter part of the night being generally its favorite time; - or very early in the morning.

The Paroxysm is at once recognized by the laborious breathing, and sense of want of air, and dyspnoea. The sufferer will seldom

lie down but sits with elbows resting on the knees and mouth open gasping for breath.

The respirations may be less than in health. The inspirations are performed with spasmodic efforts; and the expiratory act is attended with a whizzing sound, and is prolonged. Speech is very difficult, and words are interrupted by the spasms. Change of position is much dreaded, and made slowly.

Cool air is appreciated by the patients probably on account of its density and bracing effects; they want the window opened so that the breeze may blow directly on them.

The face is very pale and presents a distressing appearance, occasionally the lips pallor is accompanied by a cyanotic hue, strikingly deathlike.

No disease inspires more tender interest or more touching compassion than this: and nothing can more strongly arouse the sympathy of the physician than the suffering and distress observed in an asthmatic patient.

The urine is limpid and passed frequently and in abundance. The pulse is small and feeble, caused by the accumulation of blood in the right cavities of the heart during the paroxysm, which may be attributed to obstruction of the pulmonary circu-

lation.
The surface of the body is cool. The nostrils are widely dilated. The duration of the paroxysm varies in different patients, and in the same patient at different times. A severe attack presents a more distressing scene than can well be imagined by one not familiar with the disease.
An attack may last only a few moments, or several hours, or even several days without any intermission. When the cessation is permanent - for the usual length of time, tranquil, refreshing sleep follows. After the suffering has abated, cough and expectoration will

probably occur unless they had existed prior to the attack and will continue for several days, except the attack had been particularly mild. The expectoration is often streaked with blood, and occasionally hemoptysis takes place. The recurrence of these attacks differs greatly in different cases: in some, they are periodical, in others, they are extremely irregular. Some patients suffer from a diurnal recurrence, with others, night is the period when their dreaded foe makes its appearance.

Salter thinks that the former cases are almost always associated with bronchitis, or diseases of the

heart.

Females sometimes have attacks only at the menstrual periods. When persons are subject to annual attacks, they are designated as hay asthma:— these occur in the summer season. When they occur irregularly, they are attributable to some exciting cause; although in many instances this cause may not be apparent.

Chronic bronchitis is not unfrequently a concomitant; and on account of this coëxistence we find, during the intervals, cough and expectoration.

Emphysema is also often present, and will be characterized by

deficiency of breath, on exercise and dyspnoea in proportion to the amount of emphysema.

Asthma has been subjected to many divisions, according to the views which each writer has entertained concerning its pathology, so has he divided or classified the disease. Some have made many species, while others have divided it into three only, viz: the spasmodic, the dry, and the asthma resulting from abdominal irritations. Dr. Good arranges the disease into two varieties, the dry or nervous, and the humid. These distinctions appear to be based upon mere symptoms of the disease, which should certainly

be attended to in the treatment;
but as they are ever varying, they
cannot serve as a basis on which
to found a correct pathological
division.
A later author has divided the
disease into idiopathic and symp-
tomatic. This division is perhaps
preferable to many which have been
given. It does not lead us astray
as those might do where the symp-
toms are taken as a basis for a
classification, and it gives us
this advantage, — it serves to direct
attention to the <u>source</u> of the disease.
It often attacks men than Women,
and adults more frequently than
children: — also, the robust and

Asthmatic are more subject to it than others can and feel.

Symptoms. An attack of this disease is usually preceded by premonitory symptoms such as languor, drowsiness want of appetite, emptiness about the Precordia, headache, and other dyspeptic symptoms. A person may be troubled with these unpleasant symptoms for days, or even weeks, but sooner or later the paroxysm comes on suddenly. The patient awakes, after being in bed a short time, with difficulty of breathing, attended by wheezing, and great constriction in the thorax. These sensations continue until he can no longer remain

in a recumbent position, but raises himself in bed — tries somewhat relieve the distressing sense of suffocation. He calls for fresh air, and often rushes to the door to obtain it, only to be disappointed in its non-relief. The patient now appears to be in great distress. He throws his arms wildly about, his articulations are feeble, his countenance is either livid and tumefied, or pale, his chest heaves violently, and all the respiratory muscles are brought into play to effect inspiration and expiration. Attending these symptoms is often a dry cough though this is not invariably the case. The expirations

are sometimes cold and the pulse during the paroxysm is quick and feeble, generally irregular, but sometimes it is entirely unaltered, - and the urine, during the time, is copious and pale.

These symptoms may continue several hours, but generally they begin to abate by the next morning.

When the paroxysm is going off, a warm sweat makes its appearance over the surface of the body, the cough is fuller, the expectoration, which has before scanty or entirely deficient, now becomes copious, and the urine deposits a lateritious sediment.

With the appearance of these

favorable signs the symptoms gradually wear off; the difficulty of respiration decreases and the sense of suffocation and constriction gives way to a free and easy passage of the air into and out of the lungs. But although the patient has now obtained a state of comparative repose he is still troubled with some unpleasant symptoms such as general uneasiness, and with the slightest exercise difficulty of breathing returns. These continue throughout the day, and night again usher in the same distressing feelings before experienced but generally in a milder form. The disease may continue in this

way, reunting by day and growing worse at night, for a week, or mon-ont getting milder every succeeding paroxysm until it gradually wears itself out. Digestion, which was before deranged, is now carried on in a healthy manner the constitutional vigor returns and, to use the language of an eminent writer, "good humour and sunshine again enliven the mind."

The period intervening between the cessation of one attack of the disease and the appearance of another is of various duration. An asthmatic may pass months, or even years, without experiencing it; or, if he is exposed to the influence of an

exciting cause, a few days only may elapse. It sometimes occurs periodically. Heberden mentions a case where there was a renewal of the asthmatic paroxysm at intervals of ~~six~~ seven years for six successive periods. Other cases are recorded of women who had an attack every menstruation period continuing for some days.

Causation. The causes are various: accumulation of blood in the lungs, or mucus, disagreeable vapors, a cold, damp atmosphere, or a close, hot air, flatulence, accumulated foeces, and organic diseases in the thoracic viscera are exciting causes. Noxious vapors will produce it in the majority of patients who are susceptible

of the disease, through the mass of mankind no matter how many morbific exhalations they may be exposed to, never experience the affection. Materies morbi such as gout and rheumatism are also causes of the disease.

The predisposition can be transmitted by inheritance. To prove that it is congenital it occurs not infrequently in early childhood, and even in infancy, independently of any of the external causes, but it is yet a mooted question whether it is always congenital or acquired in a certain proportion of cases. It is true that it does not occur in a certain proportion of cases until youth,

and it is often deferred until old age, and then nearly always follows some pulmonary affection such as bronchitis or whooping-cough.
Exciting causes are requisite in the majority of cases. The most prominent causes that produce the disease in some people do not affect others at all and no inconvenience while exposed to this cause is appreciable by them.
Newly-mown hay will produce the disease in many who are constitutionally susceptible to it, and asthma may never occur except when excited by this peculiar irritant.
The term "hay-asthma" is applied to cases occurring only during the

Summer season. Although there ~~may~~ is no newly mown hay to produce the affection, those who live in the city (already predisposed to the disease) may have hay asthma. This is doubtless owing to some exciting cause drifting in the air emanating probably, from the vegetable kingdom.
On going to sea, the disease is sure to abate gradually, and finally disappears entirely after sailing a certain distance from land.
Feather beds and pillows are excitants of the disease in some persons, while thousands of others may enjoy them without the least inconvenience.
The powder of ipecacuanha inhaled, will produce it in some instances.

Several cases are known to have been caused by the emanations from the bodies of animals such as the sheep cats and dogs.

The dust emanating from a carpet while a room is being swept also that from grain and particularly from horses while being curried, are exciters in some instances. Several examples of this idiosyncrasy are known.

Indigestion is a frequent exciting cause: it produces the disease in some patients oftener than anything else. Fright and strong agitation of the mind are also exciting causes. Habitual

bronchitis coëxist in many cases with Asthma and it is reasonable to suppose that (to a certain degree) the paroxysm may depend upon the bronchitis, and if the latter could be removed the violence of the paroxysm might be diminished. The paroxysms may become prominent even when a common coryza exists.

The development of the disease may be induced by climate. Patients may suffer very greatly in one locality, and but little in another.

The causes of Asthma may be separated into two kinds:- first- those acting directly on the lungs, and secondly those which operate indirectly

through the medium of the general
system.
Among the first class, are the ba-
sious gases which, being inhaled,
may give rise to so much irrita-
tion as to occasion the disease.
The vapour of Lead also in some
instances has the same effect; and
some cattle appear to be very subject
to it. Different states of the
atmosphere has considerable agency
in developing the disease, and it
is a singular fact that some
individuals can breathe an air with
entire impunity, which would cause
an attack of the disease in another.
Lastly, some persons are only exempt
from the disease while breathing the

inhale air of crowded cities. while others must inhale the pure air of the mountains or be doomed to suffering. And again, some like best a cold damp atmosphere, although the larger number can breathe only dry, warm air.

Diseases of causes acting indirectly on the pulmonary System may be mentioned Substances making an unhealthy impression on the alimentary Canal. Of these may be cited Worms, irritating Substances introduced into the Stomach, and indigestible aliments. Metastasis of gout and rheumatism sometimes prove a cause; - also, the drying up of ulcers; - and, indeed,

Since there is predisposition to the disease in question (which may depend upon a peculiar conformation; or preternatural irritability of the air passages-) or any agent calculated to produce an over-excitement of the system, or those which drive the circulation upon the internal organs, will readily excite the disease. ~~In attack~~ Most writers agree in considering this disease as occasionally hereditary. Some say this depends upon a peculiar conformation of the Chest and pulmonary organs; or, to quote the words of another, "it is rather a similarity of organization and temperament that causes this liability,

from an actual transmission of the predisposition."

Pathology. I have repeatedly remarked that this is a nervous disease, caused perhaps by some exciting element acting upon the nervous system. Bronchitis often with asthma exists, but the two are not necessarily associated, and each is often found without the existence of the other. It is called nervous asthma when disconnected with bronchitis; but in reality all asthmas are nervous, and they only differ in the absence of bronchial inflammation. Numerous theories have, from time to time, been advanced relative to the pathology or proximate causes

of Asthma; but of late our investigations in pathological anatomy have enabled us to correct many of the false opinions entertained by the ancients, although we are not yet perfectly acquainted with the nature of the disease. Dissections of those who have died with all the symptoms of this disease, have, in a large number of instances, revealed some organic lesion of the heart, arteries, lungs, or some other part;- and hence many have supposed that there is no such thing as Asthma unconnected with a lesion of some other organ. Yet, on the other hand, there are some who assert that there are cases in

which the most careful and diligent investigations have not been able to discover any manifest organic affection.

Some have contended that the difficulty of breathing, and other symptoms of the disease, are dependent upon an infusion into the air cells of the lungs, which acts mechanically in preventing the free passage of air; - others (and among these Cullen) attribute all the phenomena to a spasmodic state of the ramifications of the bronchia and air cells; - and that this unnatural contraction may be the effect of too great turgescence of the blood vessels of the lungs. The

first of these theories is not tenable, because the abundance of fluid which they suppose to be the original cause of the disease is not present till near the close of an attack, - and when a copious mucous expectoration does occur the suffering usually abates. The second theory, though much more plausible, still has its defects. As a late writer has remarked, "if the spasm is dependent on vesicular turgescence, why do certain medicines almost instantly arrest the disease? It certainly cannot be by dissipating this vesicular fullness; - the nature of the remedy does not warrant such a conclusion." It is admitted

by those who oppose this theory that there is more or less pericardian turgescence but that it is a secondary effect merely of the preceding irritation. Some writers who have objected to the above opinions have endeavored to explain the nature of the disease in a different manner. Before giving their theory, it will perhaps be as well to state that it has been clearly demonstrated that the principle organs, as the stomach, &c, are intimately connected by nervous communication with the lungs, and that impressions made on the stomach, in consequence of this connection, are readily transmitted to the pulmonary organs. —

This connection is effected by the pneumogastric nerve and this nerve presides over the contractibility of the glottis, the bronchia, and the air cells of the lungs. Hence in such cases the disease may act directly on the lungs, or indirectly through the system, by impressions made on the Stomach or some other organ.

Now if there is a predisposition to the disease, whether hereditary or acquired; — or, in other words, if the lungs are peculiarly susceptible to the action of morbific impressions, an unhealthy excitement in the mucous membrane of the Stomach will be readily communicated to the lungs, which, being susceptible to

the impression, an irritation is established; this irritation may produce a contraction of the bronchia and air cells, and, as a consequence, we have all the symptoms of Asthma.

Prognosis. No matter how severe or protracted the paroxysms are there is no immediate danger to life; - it is possible, though not probable, that a fatal termination may result. According to the suffering and severity of the uncomplicated attacks, and their tendency to increase, - or frequency in proportion to the of the paroxysms, - must the danger increase, and the recovery of the patient be regarded as questionable.

If the cause is obvious and easily

removed, the affection occasions very little inconvenience - but if the paroxysms are complicated with various other diseases and unknown agencies that cannot be eradicated, the nature of the disease is greatly and distressingly aggravated. Of course the danger is commensurate with the violence of the attack. Some patients live to a ripe old age, having been subject to the disease from childhood. but on the contrary, it has doubtless shortened the lives of many. The right ventricle and auricle are supposed to be dilated during the paroxysms, owing to the impediment the blood meets with in passing through

the lungs. Also, the great expansion of the lungs during a paroxysm is liable to increase emphysema, and to shorten life. Pneumonitis, or severe bronchitis, may destroy life, owing to the weak state of the system during a paroxysm. If the disease depends upon organic lesions, such as dilatation of the cavities of the heart, or ossification of its valves, or aneurism of the aorta, or indeed, upon any serious organic lesions, there is, of course, danger to be apprehended. But if it be consequent upon mental excitement, slight irritations in the lungs, or some other organ, it may cease

with the offending cause. Slight attacks may occur frequently without much inconvenience, and may continue during a life time; yet, in other cases, hydrothorax, phthisis, and other diseases, are the consequence. This is particularly apt to be the case when the disease is of a violent character.

Treatment. There is great diversity of opinion respecting the treatment of Asthma. According as writers have entertained different views relative to its pathology, so have they formed opinions concerning its treatment. And there is another circumstance which has considerable agency in the origin

of these diverse opinions. I allude to the different effects which a particular medicine has upon different individuals, and even upon the same individual at different periods. Authors have divided the treatment into that which is necessary for the removal of the paroxysm, and that which is to effect a radical cure. Among the former class of remedies, bleeding has been considered one of the most prominent, and it is one of the remedial agents about which there has been much contention, some being in the habit of prescribing it almost constantly, while others condemn it altogether. It is

now I think, generally believed that a medium line is best; For although it does not appear to be of much advantage in allaying the paroxysm, yet there are cases when it cannot well be dispensed with. Such cases are those attended with great pulmonary congestion; the vessels of the neck are turgid, the countenance livid and bloated, besides other signs indicating a loaded state of the blood vessels of these parts. Bleeding also appears to be indicated, either general or local, in those cases attended with considerable irritation of the bronchial mucous membrane, amounting sometimes to inflammation.

If we should ever have occasion to bleed, there are some precautions to be remembered. – In judging of the necessity of bleeding in Asthma we must not be guided by the state of the pulse, as this is sometimes weak and irregular; and did we not know the nature of the disease we should proscribe bleeding altogether; but this being a consequence of the obstruction offered to circulation, bleeding, when it is indicated, may be resorted to, – though very often it is done without much apparent good effect. If the disease follow suppression of the menses or hemorrhage ~~of the~~ from piles, local bleeding by leeches will be

useful. Narcotics are considered among the most useful remedies in this disease, and are recommended both during the continuance of the paroxysms and in the intermissions. After giving opium, or some other narcotic, some recommend placing the patient in a favorable position for inducing natural sleep; - the patient does not consume so much air as when awake, and does not suffer so much from dyspnoea. Hence some think, if we can by the use of narcotics lessen the frequency of respiration, we shall give the patient all the advantages he derives from natural sleep. It has

been advised to combine anti-
spasmodics with narcotics, which
combination would appear to be
useful when the spasmodic con-
dition is predominant; yet in many
cases most of the anti-spasmodics
are too stimulating. Hoffman's
Anodyne, or Sweet Spirits of Nitre
are considered good. Opium is
one of the narcotics most used,
and it, like many other reme-
dies, has been both condemned
and approved. Among those who
disapproved of it was he who
averred that it did considerable
injury in his own case. This in-
stance, however, cannot I presume,
be taken as a fair trial; as the

dose in which he took it was sufficiently large to have caused unpleasant results, even in a healthy individual. Other narcotics have been recommended; Stramonium has, in many instances, acted like a charm. The usual mode of administering it is to smoke the dried leaves either in a pipe, or prepared as a cigarette. It may be smoked alone or with some other article. It produces a warmth in the chest, and often brings on free expectoration. It is very certain that this remedy proves marvellously beneficial in some cases, while in others it simply mitigates the paroxysm, producing

a cessation of the disease, though it may not be permanent. Injurious effects are said to have resulted from its use. Vomiting, just before the appearance of a paroxysm, it is said will sometimes prevent an attack. Emetics, also, appear to be a very useful class of remedies in this disease, as they excite revulsion to the skin and stomach. Lobelia has been considered by some one of our best remedies, and it has even been asserted that it will almost instantly check the disease; but other writers, who have less confidence in it, consider it only as a palliative and not to be relied on. The weight of authority,

however, appears to be in favor of its efficacy. It is said that much of its influence consists in its narcotic, or antispasmodic power, though in part is due to its emetic effects. It is generally given in tincture, in the dose of Zi or Zii repeated every two or three hours until its effects are experienced. Large draughts of the coldest water, hot water, strong coffee, vinegar, or vinegar with Molasses, are said in some cases to have completely arrested a paroxysm of Asthma. The object in treatment should be to lessen the suffering and mitigate ~~relief~~ the paroxysm as quickly as possible; and the choice of the

patient is invaluable as to the measure which is most likely to bring relief. Asafoetida, dracontium, conium, Indian hemp, and hydrocyanic acid have each been found efficacious. The others have in some instances produced good effects. The inhalation of chloroform will sometimes cut short a paroxysm, the patient passing in a few moment from what seemed almost the agony of death, into a placid condition of ease and comfort. This is an instance among the few in which we have an opportunity of appreciating our medical skill. Dr. O. S. Morrell, of New York,

States that he has succeeded in obtaining relief in an attack of asthma by prolonging as far as possible the expiratory act, then waiting as long as possible before inspiring and retaining the air at the end of the inspiration as long as possible; this plan being continued for fifteen minutes. He states that he has obtained immediate relief in this way.

Warm pediluvia may be useful, and it is hardly necessary to say that if the attack be brought on by an overloaded stomach an emetic or cathartic is indicated. Hot coffee is highly useful as a

palliative. Another palliative, which has proven in one case to be curative, is the bark of the common hickory tree. It must be dried before using it, or it will make the mouth sore:- it is to be chewed or used as a substitute for tobacco. When bronchitis coëxists, Iodide of potassium may be used,- also Chlorate of potassa. These remedies are to be used during the intervals. A change from the city to the country often produces some relief; and, vice versa, persons living in the country may find a removal to the city beneficial. There can be no fixed rule as regards locality, and the patient's own experience is the surest adviser.

Plastic Surgery of the Face

Geo. Arthur

February 10th 1872

Plastic Surgery of the Face

On reviewing the history of plastic surgery, we are obliged to admit, as in the case of many other great inventions or discoveries, that enlightened Europe has been long forestalled by the barbarian East. For we find, that from time immemorial, the native Indian surgeons have been extremely skilful and successful in the delicate operations of rhinoplasty. In the operation of Rhinoplasty especially they excelled, in consequence of the fashionable mode of punishing criminals in those countries, by a rough amputation of the nose. At first the natural nose was simply replaced with a slide warm and stretched on to [illegible]

authorities interfered with this mode of proceeding, which virtually annulled the punishment, and the Surgeons were obliged to resort to the so called modern operation of rhinoplasty.

The first European who attempted these operations was Taglia cozzi, a native of Bologna, who lived in the latter part of the sixteenth century. Shortly before his death he published a work, in which he describes his method of operating. He also confined himself chiefly to the rhino-plastic operations, and originated that particular method of operating, which still bears his name.

After his time the operation became a common one, and the principles were applied, not only to the face and neck, but

also to other parts of the body, as, for instance the operations for fecal and urinary fistulae, and the congenital malformations of the urinary and generative apparatus.

The primary division of plastic surgery is into two classes of operations: viz.

1st Operations for the relief of congenital deformity.

2nd do. do. do. do. noncongenital do.

Under the first division we have the operations for harelip, imperforate anus, etc.

Under the second head, all operations for deformities resulting from disease of or accident to, fully formed parts. The latter operations are generally much more satisfactory than the former. The general plan of operation is the same in both classes, and certain conditions must be observed in

both, to insure success in either.

Previous to the operation the patient, if not in a healthy condition, must be placed under circumstances and treatment most conducive to health, and if the part to be supplied has been destroyed by disease, we must wait until there is no probability of the disease recurring in the wound we purpose making. Liston says that two years should be allowed to elapse from the complete disappearance of the disease, to the commencement of the operation. After the operation the patient should be put under general antiphlogistic treatment and diet; and kept as quiet and comfortable as possible.

When it is possible we should carefully, and separating the integument from the subcutaneous tissues, and we should always make the incisions as shallow as practicable, as the amount of contraction of the resulting cicatrix is, the extent of surface being the same, usually proportionate to the depth of the wound. Hence it is that those penalties in which the deficiency is supplied by sliding the integument over the deformity, result in less ~~deformity~~ distortion than those in which the tissue is united only by a narrow strait or pedicle, to its original seat.

No lesions can be made to unite which are not identical in structure. Hence the greater success of those operations

tions in which the deficiency is supplied by the integument of parts on the immediate vicinity, over those, in which it is transferred from a distant locality;— as in the Italian rhinoplastic operation—.

The reason of this difference is obvious, for although the tissues may be the same in name, still as the same tissue is designed for somewhat different uses in different localities, it is necessarily somewhat modified. This obtains especially with the integument, with which tissue alone we have to deal in plastic surgery. We could not for instance supply a missing nose, from the hard skin of the sole of the foot, as well as from the arm, or from the arm as well as from the forehead,

or check. Although absolute homogeneity is unattainable it is nevertheless approachable.

In cases in which the skin is entirely removed from the location, a sufficiently large pedicle must be left, to supply the flap with vitality, until its vessels can throw out anastomosing branches, to meet those of their new neighbors, who will make equal advances. This process will be sufficiently advanced in a fortnight, to allow of the section of the pedicle, which can then be moved into place. It is much better if possible not to divide this pedicle, but there is usually no room or choice in the matter.

The various operations

are more delayed and for a considerable time, even after the division of the pedicle, all the sensations of the transplanted portion are referred its old seat. This however is gradually altered until the flap becomes perfectly naturalized, and all its sensations are referred to the proper place, i.e. its present position.

The greatest impediment to success in plastic surgery is haemorrhage. Let a few drops of coagulated blood intervene between the two cut surfaces, and there is an end to union by any intention. The operation must then be repeated, with much less prospect of success. The surgeon should always wait until the parts become thoroughly dry and somewhat glazed.

before he introduces his suture and fixes the flap. And he should then exercise the greatest caution against renewed haem-orrhage, by keeping the parts cool and moist.

The dressing should be light, and not too often renewed, as entire rest is necessary, for the delicate processes of nature transpiring in the wound.

In some cases a process of absorption is set up, and the new portion is very much lessened in size. This cannot be prevented, and if it goes so far as to destroy or mar the success of the operation, we shall nevertheless have a better ground to work upon, and less to supply in a second operation than on

the first.

Either dry or moist gangrene may occur, but if symptoms of this accident do not appear by the fourth or fifth day, we may look for a favorable result. If this should occur, we can do little to prevent, and much to encourage it by frequent examinations. The best method of proceeding in this event, is to cover it up, and let it rest in place, until further developements force us to the conclusion, that the operation has failed. Erysipelas may also occur, but as this is common to all surgical proceedings is does not deserve a separate consideration. It is often very hard for some time to make out the prog

nosis, for in the most favorable cases, the flap becomes white & cold, and afterwards assumes an unhealthy puffy appearance.

We should of course prefer the most unirritating kind of suture we can find Thus, according to Dr. J. Marion Simms, who states that he has made the most careful investigations into the matter, is the Silver wire suture. So we should unite all the wounds with the Silver wire suture.

The extreme vascularity of the integument of the face, and the absence of large superficial vessels, ensures speedy recuperations from wounds, and exemption from the frequent accidents, attending injuries to parts endowed with less vitality. Hence it offers peculiar ad-

vantages for the performance of operations elsewhere dangerous or impossible. Large tracts of surface which have been destroyed by disease or accident; can be replaced in this locality, with great prospect of success.

The general divisions of the plastic surgery of the face, are the rhinoplastic & cheiloplastic, or operations affecting respectively the nose and lips, with the adjacent portions. These parts are so frequently the seat of disease, that the operations on them, by reason of the great number of cases, and advantages for observation and comparison, have been reduced to somewhat definite rules. Thus giving

the operator the advantage of the experience of all preceding surgeons.

Rhinoplastic Operations

Although the art of manufacturing paper or rubber noses has arrived at a high degree of perfection, still for "ease and convenience" there is nothing like a real flesh and blood feature, if it is possible to obtain one. The objection to this operation is, that should it fail, the patient would be left in a worse state of deformity than before. But there is really little danger of spoiling the expression of a noseless countenance, and almost any change would be an improvement.

Although the practice of calling it

noses by legal process has had its day there are still a sufficient number of cases of mayhem, and cancerous and other diseases to keep the operation on the books.

Syphilis, cancer & lupus are generally the destroying agents of the nose which may be wholly or in part demolished by these diseases. It is never congenitally deficient. The material for supplying the new feature may be taken from the arm forehead or cheek, or even from another person, as in the case of P. [illegible] notary, but this is not a well authenticated case, and even here the results were not satisfactory.

Tagliacozzi cut the flap of material required from the arm, leaving it attached by

the usual pedicle, and bound the arm to the head until the flap had contracted adhesions with the surrounding parts. This method has completely disappeared at the present day, and has been superseded by the modern (Indian) operation. The skin is now usually taken from the forehead, as this is obviously the most convenient way, and results in very little contraction in the cicatrix. This of course applies only to the restoration of the entire nose, for in the case of a missing ala or columna nasi, the cheek and lip are much better adapted for the purpose.

In the operation for the restoration of the whole nose, a model should first be prepared to suit the rest of the countenance,

whether large or small, or of the Roman, Grecian, Snub or African type. The model should then be placed on the forehead inclining to the right or left, so as to necessitate as small a quantity of twisting on the pedicle as possible. The margins should then be traced carefully with a pencil, allowing as Dr Bley recommends, a quarter of an inch on all sides for subsequent contraction. The cicatrized margins of the remaining portion of the nose should then be freshened carefully with the knife. The point of the knife is then carried along the previously traced line, inclining a little inward to ensure better coaptation when brought into position. A broad knife is then passed under the supercilii mus

cles, the fibres of which have been previously divided.

The surgeon should then wait until all bleeding has ceased, and the parts are thoroughly dry. We then carefully twists the pedicle, and places the flap in position. We then fastens it in place with three or four wire sutures on each side and one beneath. Some surgeons prefer to supply the columna nasi from the upper lip by a second operation. The nostrils should then be plugged with lint to prevent falling together and adhesion of the raw surfaces. The wound is lightly dressed with cool applications which should not be too often disturbed. The lint plugs must be removed from time and changed

some time to time, as they soon become foul from the discharges

By the end of two or three weeks the united pieces can be cut, and an incision or trough made behind it, into which it is placed and pasted. Granulations will spring up, and will extend down to the septum, and form a support for the walls of the nose. Should these granulations become at any time exuberant, they must be checked.

In restoring the portions of the nose we may generally succeed by a sliding operation, in which the integument is slidden into place, without entire separation from its old site, and fastened by stitches. The wound left by the

incision must be filled with lint to prevent cicatrization until thorough adhesion has taken place, for the force of contraction is sufficient to wear out all the sutures and bring the displaced skin into its old position.

A number of such operations are described by Liston and Skillern, but as the principle is the same in all, it is needless to enter into a description of the incisions to be made in each particular case.

The furnishing of a new alum is usually accomplished by taking a piece of proper size and shape from the upper lip. This piece is then brought up to the apex of the nose, which has been

previously pictured, and attached thereto one pin passed through the tip of the nose and the extremity of the flap. The incision in the lip must then be closed as in the hare lip operation. Another operation consists in taking a piece out of the forehead and leaving a long slender pedicle fastening it into place. This operation is not often resorted to however.

Autoplastic Operations.

The lips also, especially the lower one, are frequently the seat of cancerous diseases, and we are not seldom called upon to replace the destroyed part with new and healthy tissue. The lip is also frequently the seat of a congenital deformity, known

is a fissure consequent upon the imperfect development. It consists of a fissure or fissures, extending from the margin of the upper lip on a vertical direction, to a greater or less distance, producing an inverted V shaped opening. It is either single or double. When double it is usually accompanied by cleft palate, when single it is usually on the left side. It is never on the median line.

Operation may be performed at any age, but preferably before the first dentition. Should this early period on consequence of the greater recuperability of the tissues, the resulting distortion will not be so great, as when it is performed later.

In performing the simple operation the head must be firmly fixed. The instrument used for cutting is a long narrow bistoury. Some resisting substance may be placed under the lip, to give a firm surface for cutting upon. Then the edges of the fissure should be carefully pared from above downward, separating all the mucous membrane from the margins of the fissure. So as to ensure union down to the edge of the palatum. The apex of the incision should be blunt and sharp. The parts of the wound are now brought into juxtaposition, and secured by one or two points of suture, usually the figure of eight. The lower one should be introduced first. The

stitches may be removed in about three days. The lip must then be supported by the silk, which still adheres, and by collodion applied on. The whole dressing may be removed in two or three weeks.

The double operation is very similar except that we have the middle piece of flesh to deal with. This may be removed entirely if small, but if large should be freshened and placed between the two surfaces of the other two flaps. One of the pins must be introduced through the apex of this V shaped flap. The after treatment is identical with that of the single operation.

In the other autoplastic operations we

must be guided by the size and shape of the portion to be supplied, and we have many operations on record, which with slight modifications, can be applied to almost any case. The shape of the deficient portion in the case of the lower lip is triangular usually, and may be supplied from the chin by a sliding operation, as described by Liston, or from the cheek, when the space is large and quadrilateral.

The upper lip is rarely destroyed but may become so contracted and adherent to the gum, that it must be lengthened by the addition of a piece of skin. This piece is usually brought down from the cheek, and if the wound so made be very large it should be filled up by a second flap, obtained from a more distant portion

of the cheek. This must be repeated of course on the other side, as the first flap only furnishes half the lip.

There are many other operations for supplying deficient portions of the face, as in the case of salivary fistula or destruction of the angle of the mouth. These may usually be remedied by sliding a portion of the integument of the neighboring parts over the abnormal space. These cases are however so numerous, so slightly different in detail, and so similar in principle, that a separate consideration of each one would be superfluous.

When severe burns have occurred in the region of the face and neck, the resulting cica-

[illegible] becomes so contracted, as to cause great dis-
tortion and deformity of the head and face.

When they occur on the neck and upper part of the breast, the head is strongly held down in a painful position, and the under jaw is frequently so much dragged upon as to be utterly useless for purposes of mastication. The lower lip can no longer retain the fluids of the mouth and the constant dribbling of saliva is very exhausting, and may be fatal.

Here is another field for the practice of plastic surgery. The bridles of cicatricial tissue are divided, the underlying muscles which have become permanently shortened are severed, and the head and jaw replaced in their proper positions. But if left in this condition, the gaping wound which has been created by the wide separation of

the lips of the incision will cicatrize anew, and the condition of the patient will be only aggravated. As in the other plastic operations a flap of skin must then be dissected up from the shoulder and breast, turned into the wound, and there retained until adhesions have taken place.

The resulting cicatrix is of course large; but as it is concealed by the dress, it is not of so much moment as in the facial operations. These operations although frequently successful, are not so certain as those described before. For the process of adhesion and naturalization of the transplanted flap must go on in the abnormal and somewhat unhealthy cicatricial tissue, which, owing to the lowness of its vitality, is frequently very much averse to contracting new adhesions. Nevertheless the

tion of the parent it so deplorable in many instances that anything offering the least prospect of it [illegible] it would trying. Should the operation fail entirely the patient's condition cannot be much worse than it was previous to the operation.

These are the principal applications of plastic surgery at the present day time, but the experience of each day proves the fact more and more conclusively that the human frame is plastic on the hands of the surgeon to an extent never realized by the originators of the art.

AN

Inaugural Dissertation

ON

Rubeola

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

John E. Hubard,

Of

Virginia.

Session of 1871/8 1872.

Rubeola - Morbilli - Measles -

Acting in conformity with one of the rules laid down by the University of Maryland, I now present for examination my Thesis; written upon the subject of Rubeola, Morbilli, or more commonly, Measles - -

This is a febrile inflammatory disease, accompanied with a peculiar eruption; - as a rule this disease like scarlatina, + variola, renders the system ever after wards insusceptible to it, but this rule like all others, has exceptions; for there are well - authenticated cases in which the diseases has occurred three, + even four times. Symptoms - "Ars, lassitude,

+ Flints Practice

shivering, pyrexia, and catarrh;
the conjunctivae, Schneiderian mem-
brane, and the mucous lining of
the fauces, larynx, trachea and
bronchii being much affected"-
Very soon there is swelling of the
eye-lids, red, + watery eyes, + this
is followed by soreness of the throat,
frequent pulse, heat, + dryness
of the skin, head ache, sneezing
hard, dry, and hoarse cough,
nausea, epistaxis, diarrhoea,
convulsions &c &c -
The eruption generally begins
to appear on the fourth day
after the fever has shown its
self; it seldom appears earlier, often

lalis, and is sometimes delayed
a week, or ten days.
The efflorescence first appears on
the temples and forehead, in a
few hours it extends over the head
& neck, it is gradually diffused
over the body, and extremities;
its full development occupying
from thirty six to forty-eight hours.
The fever generally abates after
the appearance of the rash, the
redness of the eyes, and coryza
disappear, or are much alleviated,
the nausea, & vomiting also subside,
the rash at first consist of minute
papulae, which as they multiply
coalesce into blotches that have

* I give this on the authority of Dr. Tanner's
practice.

a crescentic shape, leaving the skin between them of its natural color, as stated above the eyes are apt to suffer, the conjunctiva being much affected, & the lids swollen —

The rash begins to disappear on the seventh day, the cuticle desquamating in small branny scales, through this like the appearance is liable to variation. The eruption begins to fade after the fourth day, & goes off just as it made its appearance, at this stage as a general rule the pectoral symptoms begin to diminish, though some times they continue,

and often become aggravated, pneumonia, or diarhoea may ensue at this stage, the latter when moderate may be favorable, but is sometimes obstinate, and trouble some.

The prognosis in uncomplicated Measles is generally favorable, the chief danger in this disease is pulmonary inflammation. In children convulsions are sometimes, though not often fatal. The danger is greater in the adult, than the young, and in cold, than in warm climates; the danger is also augmented in cases of pregnancy, and

dentition, though it is rare for a child to have this disease until after the first dentition.
Great restlessness, delerium, & coma accompanied by a weak pulse and livid color of the rash are unfavorable signs.
The diagnosis is not difficult, it may be mistaken in the early stages for Catarrhal fever, but the character of the cough will be sufficiently diagnostic, it may also be mistaken for scarlatina, but the sneezing & cough, (to gether with the) & the strawberry tongue in scarlatina; to gether with the absence of the

rash on the fourth day in measles instead of the second; and the rash is not of such a bright red color. It may be confounded with small pox, but in distinct small pox the subsidence of the fever is sufficient to distinguish it. The rash of measles is not so prominent or hard as that of small pox, that of measles disappears on pressure, that of small pox does not. Measles may be distinguished from Rosola, by the catarrhal symptoms, but measles with out catarrh may be easily mistaken for it, but this form rarely occurs. Causes. It is both infectious

& contagious: the first is evident from the fact that the disease can be communicated through the air & the second has been shown to be true by experiments made,* by actual experience. That this disease can be communicated by inoculation has been proved beyond a doubt by experiments made by Prof: McGirr, & others, - the manner in which the disease is imparted by inoculation, is by taking blood from the vivid patches, tears, or saliva, or the lymph from the small vesicles, which are sometimes found to exist, and inserting

* Of course as my experience is very limited, I will have to refer you to others, such Wood &c.

beneath the skin, according to some authors inoculation renders the disease milder, but as measles is generally mild, in my opinion it would be unwise to practice inoculation, for by so doing you certainly bring about a disease which may prove fatal, whereas the chances are that the individual if not inoculated may never have the disease.

Measles prevail much more at some periods, than at others: probably, according to Dr. Wood under a peculiar epidemic influence. It occurs more frequently in winter than in

summer, & often at this season
~~more~~ than at any other season
of the year; seeming to show
that cold weather is favorable
to its production, though it
may occur at any time of
the year. Persons of all ages
are subject to this disease,
much more frequent in the
young than the old; this is
due to the disease being of such
frequent occurrence; and its
not attacking a person but
once as a general rule.—
Treatment. In the mild forms
of the disease nothing more
is necessary than to keep the pa-
tient at rest in a well ventila-

the room, prevent exposure to cold, and attend to the state of his bowels &c
The room should be kept at a regular temperature* not too hot nor too cold this is of great importance as regards children, as they frequently become restless & throw off the covering, if the room becomes heated to too high a temperature.

If the disease requires other treatment you may prescribe drinks such as slippery elm tea, solution of gum Arabic &c
If there is any signs of pulmonary inflamation and the patient is robust, with full pulse, venesection may be resorted to, this may be

* Say about 60° F.

followed by a cathartic in combination with a diaphoretic; should croup be threatened an emetic may be given, the best tobe used are Ipecacuhana Tarta emetic, or pulv: alum. This treatment tobe followed by a purgative dose of calomel.

If the cough is troublesome opiates may be given in combination with expectorants such as the antimonials &c.

The pectoral uneasiness remaining after measles may be removed by the application of blisters to the chest, or tarta emetic ointment, giving full doses of

dovers powders nightly, & attending to the patients general health; good diet &c. —

*The striking in of the rash is the effect, & not the cause of other complication (it is generally an unfavorable sign,) therefore the treatment consists in first diagnosing the complication, & directing the remedies to it. The treatment after the disease has subsided, or during convalescence should be particularly attended to, for if the patient exposes him self to cold, or wet inflammation of a distressing character may be

* I state this on the authority of Drs Flint Wood & Tanner, also upon the authority of our [illegible]

the result, therefore you should caution your patients in this respect, & insisting upon their obeying your instruction especially until four or five days after desquamation has been completed, & the catarrhal symptoms have disappeared — — — —

Having exhausted my self, & feeling confident that I have weaned the Professor, whose sad lot it was to examine my Thesis, sufficiently; I will now end a task disagreeable a like to students, & Professors —

AN

Inaugural Dissertation

ON

Intermittent Fever

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Wm. S. Arthur

Of

Baltimore, Md.

Session of 1871 & 72.

Intermittent Fever.

The most striking peculiarity of Intermittent fever, as its name implys, is occurrence of well marked febrile paroxysms, with an absence of the fever between the paroxysms.

An attack is in a majority of cases sudden, but in a certain proportion of cases, an indisposition to exertion pain in the head, loss of appetite, and general

malaise, are premonitory symptoms of the approaching malidy; so much so, that a person who has suffered from former attacks, is enabled to predict with a great degree of certainty, the invasion of the disease.

A complete paroxysms consists of three (3) distinct stages, viz the cold, the hot, and the sweating stage

The cold stage; com-
-mences with a feeling
chilliness, begining at
the loins and extending
throughout the body,
varying much in in-
-tensity in different
cases, in some the
chill being extremely
severe attended with
rigors, while in others
the chilly sensation
may be scarsely ap-
-preceable.

Notwithstanding
the feeling of coldness

which the individual experiences. There is also a gradual increase in the temperature of the body as can be shown by placing a thermometer in the axilla; this however does not apply to the extremities, as there the temperature is below that of the normal standard.

The cold stage, seems to be one in which, the

internal organs are congested, since there is less blood at the surface of the body, and the whole mass of blood has not been diminished.

This congestion, does not stand in a causative relation to the other stages, but is merely the result of the primary morbific agent underlying the disease, and seems to be.

owing to a spasm of the peripheral vessels, by which the blood is driven from the surface upon the organs within.

The transition to the next stage viz, the hot, is generally a gradual one, the rigors cease, flushings of heat are felt, and febrile movement is at length fully developed, as is shown by the rapid increase of.

heat, hot skin, full bounding pulse, and more intense cephalalgia.

This stage usually lasts from three (3) to five (5) hours.

In the final or sweating stage, the febrile movement gradually disappears, the symptoms which marked its carrier cease, a profuse perspiration bathes the patient, and exhausted nature recruits herself,

by sinking the sufferer into a profound sleep.

The space of time between the paroxysms, is called the intermission also the apyrexial period; and the duration of this interval, enables us to divide the disease into three distinct groups; the quotidian tertian, and quartan.

In the first, the paroxysms occur daily in the second, the paroxysms occur

on the third day, while in the last named the interval is about seventy (74) two hours, the attack occurring on the fourth day.

Besides the types of the disease above enumerated, there are others more or less frequently met with, among which are the double quotidian the double tertian, or even a double.

the urine.

When the disease has been unusually protracted the face assumes a peculiar yellowish tint, and this together with the anemic state of the person affected denote what is termed the "Malarious Cachexia"

General dropsy and an enlargement of the spleen commonly called

Ague Cake are occasional complications met with in intermittent fever.

The precise pathology of the latter, is not understood but seems to be a congestion of that organ, caused by the action of the peculiar malarial poison.

The duration of the disease is very indefinate, it may end spontaneously, but it frequently,

continues for weeks or even months, unless arrested by proper curative measures.

This indefinite duration, and the fact that subsequent attacks occur in a vast majority of cases, are striking points of distinction between intermittent and the continued fevers.

It was formerly supposed, that if an attack of

malarial fever was allowed to end of its own accord the danger of an attack recurring would be much lessoned, but clinical observation has shown the reverse to be true, and that proper therapeutical interfearance, will do much towards preventing a second attack of the malidy. It is not unfrequently the case, in Malarious districts, that

that the practitioner will meet with cases known as latent, or dumb ague; in such cases the rigors are wanting, and it is only by carefully observing the variations in the temperature of the body, together with the signs of bilious derangements, that the physician is enabled to make a correct diagnosis.

The species of Cryptogramic plants,

which abound in low marshy districts, are held by the best authorities to be the cause of Intermittent fever.

These plants may be generated in situations previously healthy, by upturning the soil, as in making tracks for railroads or in digging a foundation for a house; while on the contrary, situations formerly malarious may be

rendered healthy, by
being cleared & improved
thickly settled.

The period of
incubation varies, it
may be a few days
or a few weeks, and
in some cases, a
much longer time
has elapsed, after
exposure to malaria,
before its morbid ef-
fects are made
manifest.

One of the strange
peculiarities of intermit-
tent fever, is its liability

to relapse without the patients being resuspected, to the influence of its special cause.

The diagnosis of simple intermittent fever presents but little difficulty the type being determined by the interval between the paroxysms.

Cases of latent intermittent fever, or where this fever exists in combination with other diseases, may mislead the

practitioner but fortunately the semicides indicated, are generally beneficial, in both cases, and should especially in malarious regions, or where the poison, is suspected form part of the treatment of such diseases.

Simple intermittent fever as regards immediate danger cannot be regarded as a grave affection, but its liability to take on a pernicious

type should be remembered and carefully guarded against.

For the cure of intermittent fever the salts of Quinine will in a vast majority of cases prove successful.

Preparatory to administering the Quinine, a few grains of blue mass, followed by a saline purgative should be given, so as to clear out the "Primae Viae" and secure

the body with cool or tepid water, and cool drinks, will be beneficial. Sweating should be encouraged in the last stage.

The quinine should be continued for some time after the apparent recovery of the patient, to which if he be anemic some preparation of iron should be added.

Many persons are of effect to

be extremely disagre-
-ably effected by
the preparations of
Cinchona, in such
cases, it will fre-
-quently be tolerated
by useing it in
smaller doses or
by combining with
it, a smaller quan-
-tity of the sulphate
of Morphia.

Should the quinine
not be retained by
the stomach it may
be administered per

should be carefully watched, and a peculiar puffy expression about the eyes of the patient, call for its temporary suspension.

Enlargement of the spleen, should be treated by some of the preparations of cinchona, and by applying the ointment of belladonna over the affected organ.

Finally as it is well known that

"Prevention is better than cure" it would be well to advise those exposed to Malarious influences to take a few grains of Quinine daily as by so doing they will avoid contracting this most distressing malady.

AN

Inaugural Dissertation

ON

Hygienic Management of Children.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Eugene H. Humphreys,

Of

Salisbury, Maryland.

Session of 1871-72.

Hygienic Management of Children

The Subject of the nature and diseases of Children is a highly interesting and important one. Do on account of the peculiarities in the nature of the child compared with that of the adult. More interesting and important still, because as a general rule, not generally specially taught, and almost universally looked upon as secondary. It is certainly a subject which Claims the strictest and most conscientious attention of the medical practitioner: those professional skill, without it, is deplorably faulty. And the Schools which do not specially teach it are defective; and Common-Sense, it is to be hoped, will, in a short time, Correct the error. The ability with which its principles

re taught in our School and my appre-
ciation of the importance of this branch of
the Science prompts me in the selection of
the subject of this Thesis. Being guided entirely
in the preparation of the same by the teachings
of the eminent Prof. Howard upon which
my knowledge of the subject is alone based.

The hygienic management of Children
is of vast importance, as one half the mor-
tality occurs in Children under six years
of age.

The most important consideration
in hygiene of Children is Food; and which
we will now speak. In order that it may
be nutritious, food should contain all the prox-
imate principles of the body; but the albuminoids
are the most important. The starches and sugars

matters are essential. and the inorganic or
mineral substances are also necessary though in
smaller quantities. Milk, Nature perfect type
of food contains all these. Casein, which
is the only albuminoid and hence the only nitro-
genized principle, is converted in the Stomach
to albumen. In Cream we find the oleaginous
matters, which are more abundant in milk
than any other animal fluids. Milk is
the food for all young animals. The human
breast is made for the child, and every
other kind of food is inferior and unnatural
Any departure from the natural process
during the first few months is jeopardous
to the health and life of the Child. But
children are often neglected in this respect.
through ignorance on the part of the mother

of the laws of nature. More often on the contrary - fashion, false-pride, affected delicacy &c. are the means of subjecting the child to the inevitable dangers of artificial feeding thereby producing the greatest - mischief. Such a thing is criminal & barbarous

The infant should be put to the breast as soon after delivery as is consistant with the comfort and convenience of the mother. Nursing, better than anything else, forms the nipple; and, tends also by reflex action, to contract the uterus. The first - milk, or Colostrum, acts as a purgative to the bowels of the child helping to remove the meconium. As regards how often the child shall nurse, there is no absolute rule. One child may require it every two hours - another every three or four.

The best plan is to leave it to the Child's instinct: Within the first month, the Stomach will contain not more than two or three ounces the greater portion of which will have out within three hours. Generally speaking the breast may be given it every three hours in the day, (not so often at night), though many children will nurse eagerly every two hours. "The child is a naturally-born glutton." The habit of nursing the infant every time it cries should be positively prohibited as deleterious to both infant and mother, in overloading the Stomach of former, tearing down the nervous system of latter. In nursing, regular intervals should be observed, so far as possible, in order that the digestion may not be interfered with. If the child

vomit habitually after nursing and the vomited matter is not acid, it simply indicates that the stomach is overloaded. If this be allowed to continue digestion will necessarily be disturbed. The secretion of milk is not established in the woman until during the third day. And during this interval the child may be nourished, if necessary, upon a little sugar and warm water. If the flow of milk be abundant, and if it does not disagree with either mother or child, nothing else but the breast should be allowed for about the first six months. Artificial feeding should not be resorted to except when absolutely unavoidable on account of disease or insufficiency of the milk secretion. The mortality is very much greater in children who are artificially

nourished. The proportion being 18 to 29.
Of twelve twins six were nursed and died
all: whereas of the remaining six which were
fed by hand, three died - and of the three
that lived two were puny and delicate.
"Fortunate is the infant who derives nour-
ishment from the life-giving bosom of its
devoted mother."

The best thing to be done, and
which should always be done if practicable,
when the mother is unable to nurse her child,
is to secure a Wet Nurse. The choice of
a wet nurse is of great importance and is
a very delicate and difficult operation, both
morally and physically. In making the selection
two or several points are to be considered; of which
the following are the most important.

hereditary predisposition. The general looking woman should be rejected if she have a tendency to Consumption Scrofula or Syphilis. It is not certain that Phthisis or Scrofula are transmitted by the milk, but Syphilis certainly can be, as children have died from having contracted it at the breast. The action of Syphilis will not of course admit it, and the diagnosis is often impossible, since it cannot be detected in the milk. The nurse should have good milk, and women with plump figure, and breasts that are of moderate size, round and firm, and marbled with blue veins generally furnish that kind. Large flabby breasts yield less milk than those described. Too much importance has been attached to soundness of the teeth. The color of the gums is

of more significance, as it indicates the character of the blood. The milk of brunettes is superior to that of blondes, the solid constituents being 130 in 1000 in former to 120 in latter. Women of light complexion and hair are generally more apt to be scrofulous and of irritable temper. After all however we must look to the supply of good milk. And what are the characters of the same? It has an average sp. gr. of 1032 and is strongly alkaline, which character it retains from five to six days after being drawn. It is sweeter than cow's milk. Like all other milk it separates on standing the cream rising to the top. The casein, sugar and salts are dissolved in the liquor lactis, a white opaque liquid, and the milk globules are distributed throughout and are the only

matter discoverable in pure milk commingled with other substances. The greater the number of the milk globules the richer the milk - the casein and sugar being generally in proportion. Milk may be too rich; though this is much more easily remedied, than the opposite condition. The longer it remains in the breast the poorer it becomes, on account of the solid constituents being absorbed. Therefore when it is desirable to diminish the richness of the milk, we have only to direct - the mother to nurse at greater intervals - the child having a longer time to digest - poorer milk.

3. The wet nurse should not only have good milk, but plenty of it. The quantity consumed daily by a healthy infant two or

ten weeks old is about one pint - which gradually increases to a pint and a half or a quart at the end of two months. The quantity of milk consumed in a year is about 1000 lbs of which about 10 lbs is solid matter. The nurse child should be examined to see if it is well nourished and free from eruptions &c. If the child becomes weak and thin from the breast of the wet nurse it should be offered food immediately after nursing in order to see if she be practicing any fraud.

4. Her age should not be more than thirty five nor less than eighteen. In the new young the butter casein and solid constituents are increased; while in the older the milk is thinner and contains

more sugar.

5. As a general rule multiperae are preferred to primiperae, as they know more about the management of children; besides we have better means of ascertaining her previous character, and also the quality and persistence of her milk.

6. It is highly important that the nurse should furnish an abundance of milk for a long time. Some very fine looking women lose their milk after a few months. The rule is that the woman should have been confined about the same time as the mother whose child she is to nurse, although women with children two to six months old make very good nurses. But after eight or ten months it is not suitable for the infants. The milk

diminishes in quantity and becomes less nutritious about eighth month. Above all we should see that the milk is good in quality and sufficient in quantity; and that the nurses child is not too much older than the mothers.

7. The nurse should possess a sweet and amiable disposition, and of sufficient intelligence to take care of the child in the absence of the mother.

There are specific reasons why a mother should not nurse her child. And as they are of frequent occurrence they should not be left unspoken of. With regard to syphilis, there is difference of opinion. Syphilis is transmitted by inheritance. If the mother contract the disease after impregnation,

the child will be apt to escape; and it will certainly escape if she contract it after the seventh month. Hereditary transmission ceases after the disease has passed into the third (tertiary) form. It is possible that the milk may have some influence but it has not been proved. But in such cases the mother should nurse her child, because if it were given in charge of a nurse she would certainly be contaminated the child may be cured by treating the mother. Mercury has never been found in the milk, but children have recovered when the mother alone has been treated. Some think that the syphilitic mother should not nurse her child. There is also a difference of opinion with regard to scrofula. In Phthisis the mother should not nurse on account of its bad effects on

the mother. Sucking at the nipple has a tendency to aggravate the symptoms of the disease. She should nurse when there is only an hereditary predisposition and no symptoms of the disease have presented themselves - and the mother be otherwise healthy.

In some cases, generally in nervous women, the milk does not at all agree with the child, from no adequate reasons apparently. Then the child should be taken from the breast. Change of air, tonics, stimulants, nutritious food, &c., will frequently remove every source of trouble.

A malformation of the nipple sometimes prevents nursing. Many young women have become corpulent when pregnant and the nipple becomes depressed. This condition

is increased by corsets and pads. This should be remedied, or rather prevented, by wearing the [illegible] nipple-shield as soon as the tendency to depression is discovered.

Sore nipples constitute an exceedingly good reason why mother should not nurse. The pain is so extreme in some cases, that the application of the child is a constant struggle between maternal love and physical agony. Every time the child sucks, the fissures are freshly opened causing the most excruciating pain. Sore nipple most commonly consists of a long, narrow ulcer 1/8 to 1/4 inch in length by a horse hair in breadth, situated at the side or base of the nipple. This inflammation may extend along the ducts and eventually cause mammary abscess. The preventive treatment

of sore nipples should be - rest, washing &
drying the nipple after nursing and dusting
with powdered arrow-root, or Curative treat-
ment. - Before ulceration mild astringent
washes. If such fail and ulcer is established,
touch the part (ulcer) with Nitrate Silver (gr x to ℥i)
or Bals. Tolu. Resin Cerate & Honey equal parts
to be applied after each nursing. If there be much
inflammation cupping or few leeches may be applied just
outside the areola - and biles covered with
flaxseed or Slippery elm poultice.

Some authorities contends that - Child
should not nurse when the milk is secreted in
milky one breast; but this is not sufficient
reason because the breast may be made
to perform the labor for both.

Galactorrhoea is not - always

temporary reason for not nursing, for the child may continue to nurse sometimes while the mother is under treatment.

When the mother is constitutionally feeble and exhausted in a marked degree by over-nursing, she should desist. But if not much so she must do as much as she can, assisted by tonics and nutritious food.

In acute cases it is most prudent to observe the child condition from time to time, and as soon as any impairment of digestion is perceived, nursing should be suspended until the mother is better.

Circumstances which modify Nursing.

1. Occurrence of Catamenia. During menstruation the milk deteriorates in quality and

becomes less in quantity. The density is diminished the proportion of sugar becoming less and that of casein greater. If the menses be perfectly normal in every respect, the child may continue to nurse without suffering any disadvantage. But if they be too frequent or abundant the milk becomes altered in composition and frequently dries up. When dismenorrhoea or leucorrhoea present the child is apt to suffer from indigestion.

2. Occurrence of Pregnancy. When pregnancy takes place the secretion of milk ceases or shows a tendency to change to colostrum and in a majority of cases disagrees with the child. In addition, if lactation be continued abortion may be produced by reflex

nation. Hence the mother should discontinue to nurse as soon as she is certain she is pregnant.

3. Pus or blood in the milk generally produces derangement of the alimentary canal - though the former is much more injurious. The pus comes from an intra glandular abscess. Blood may come from a fissured nipple, or it may have an intra ab origin. When either is discovered in the milk (and in all cases of inflammation & congestion of the breast) the mother should stop nursing on that side at once. Pyaemia may result from pus in the milk. There are cases on record where from this cause pyaemic abscess has occurred and occasioned the death of the child.

The milk is modified by moral causes.
Great Emotions such as violent anger grief
or joy, fear anxiety &c. affect the milk to
such a degree as to sometimes destroy
the nursing babe.
5. Milk is modified by some medicines
taken into the mothers system, and may
thus affect the infant. For instance —
Children have been poisoned by opium
which had been administered to the mother.
Therefore it is important that we should
be cautious in allowing Children to nurse
under these circumstances.
6. The child should not be allowed the
breast when the mother is the subject of
dangerous disease.
7. In acute mania the child should not nurse.

5. Highly nervous women who are frightened and excited by every change in the child's appearance, and mothers are usually moved by the ordinary occurrences of life, are not fit persons for nursing.

Artificial Feeding. — In selecting artificial food for infants we must imitate nature as nearly as possible. Therefore some other milk is suited like its natural food. That of the Ass is said to resemble it more nearly than any other, but in this Country we cannot get it: And in its stead we must use either Goats or Cows. The differences between human milk and that of the Goat or Cow is expressed in the following:

	Sp. Gr.	Fluids.	Solids.	Sugar.	Butter.	Casein.
Human —	1032	889	111	43	26.	39
Cows —	1033	869	136	38	36	55
Goats —	1033.88	864	155	36	56	55

When fed on herb- the goat gives milk very similar to that of the woman - only it is richer in sugar and the salts. Prof. Howard has frequently used goats milk with success when cows milk had failed. The strong, peculiar odor of goats milk almost entirely disappears upon boiling. Best when obtained from purely white animals without horns, and young, about two months after kidding. If of good size and well fed she will furnish enough for a healthy child. Although goats milk is much preferable to cows, we have not often never taken to using upon the latter. The milk-globules of cows milk are much larger than those of human; and it is almost always acid except when the cow is fed exclusively upon grass - and even it is only neutral. Hence the cause of it disagreeing with so many young children. Cows milk intended for children

should be daily tested with litmus paper for acid. It should be neutralized by some alkali, as lime-water or prepared chalk, Carb: Soda or potassa, and when there is tendency to constipation in the child, Carb: Magnesia. Cows milk contains less water and sugar than human, but more butter and casein; hence it should be diluted and slightly sweetened. Very fresh milk agrees with the child much better than when it has been standing; and this is perhaps due to a certain volatile principle which evaporates while the milk has been standing. Cows milk at first should be diluted with an equal bulk of water and afterwards gradually strengthened. The butter can be increased by using the upper third of the fluid contained in a vessel or by using the last third of a "milking". In preparing cows milk, we should have an eye not only to the age of the child, but to its condition also. A feeble

well-developed child of nine months requires the food of a healthy child of six months. If curds are found upon the napkin, weaker milk should be ordered. The temperature of the milk should be as nearly 98° as possible. The temperature should be raised by adding hot water, and not by heating the milk from without. It should be made little weaker than cow's milk (but not too much). Whey of milk is preferable. Sometimes the curd seems to lump together and collect in the bowels; which may be remedied by using rennet with the food or by using instead of the milk cream diluted with three or four parts of water. It is much better to use milk from one cow only. The cow should be between four and ten years of age, and perfectly healthy - with a calf not less than two weeks old. When the calf becomes five or six months old

it is then better to change. The animal should be well protected, as a decrease of butter is the result of exposure. And how is it to be given to the child? The main object is in imitating nature as far as possible; and therefore we will use an apparatus which will make the child suck. When strong enough to suck the child should never be fed with a spoon. Whatever vessel used should be kept perfectly clean and free from acidity. It should be washed with boiling water after each feeding, and when not in use should contain all the time an alkaline solution, viz: carb: soda and water, or the like. In feeding children there are two rules which should be always observed. They are the following.

1. In taking its food, the child, if very young especially, should be kept warm in cold weather.

It should occupy the natural semi-erect position, in which the stomach is more nearly perpendicular.

Substitutes for Milk. — When good milk cannot be obtained in good quantity, the milk of a hard-boiled egg may be advantageously employed. When the whole egg is used it must be nearly raw, or only heated to 120°; since beyond this temperature it coagulates and becomes less digestable. It may be boiled about two minutes. The composition of milk and eggs is very similar. Next in the preparations of animal food — particularly beef and mutton. Beef-tea is made in the following manner: "Having rinced well one half pound of lean beef, chop it up finely and cover with twelve ounces of cold water, and let it stand twelve hours in a cool place. Then strain through

coarse pieces, warm slightly and add a tea-
spoonful of lime water." A Russian physician
recommends raw meat scraped or reduced to a pulp.
Thus Dr Howard approves of it as especially
valuable in exhaustive diseases. To it should
be added a little salt, sugar and powdered cin-
namon. At first may be given about two
teaspoonful four or five times daily to a
child one year old. Barley-water made from
pearl barley is very good for children over four
months.

Weaning from the breast. — Especial
care should be taken not to wean the child until the
process of teething is considerably advanced. The child
should have from eight to ten teeth which should be
about twelfth or sixteenth month. It is always
best to select one of those period of repose between the

olution of the different groups of teeth. During
olution of the teeth the child will seldom take art-
ficial food. If the child be healthy and vigorous
d teeth be rapid, it may be weaned after the
welvth month; but if puny and delicate not
fore eighteenth or twentieth month. The health
ay be frequently impaired from weaning too soon
nd vice versa. The season of year is of great
mportance. When weaned at the beginning or
during summer gastro-intestinal trouble
lmost invariably follows. If weaned in March at
welve months old the child is generally safe. In
April less so, about one half being subsequently af-
fected. In May the danger is increased and the
child of almost any age weaned in June, July,
August or September very seldom escape bad results.
f the child becomes sick immediately after

weaning, it should be immediately restored to the breast by all means if possible. If it refuses the breast of a stranger the milk should be drawn and given it from the bottle. In weaning her child the mother often finds great dificulty in keeping it entirely away from the breast. She may use in order to create a distaste for it in the child infusion Gentian or Aloes or some other harmless bitter. Tar painted around the nipple, I have known to suffice. It induces a dislike on account of both its bitter taste and ugly appearance. We will let this suffice for the special hygienic laws pertaining to children. General hygienic laws are applicable to children if we bear in mind at all times the childs peculiar nature &c.

AN

Inaugural Dissertation

ON

SCARLATINA

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

W. A. B. SELLMAN.

Of

Baltimore City Md.

Session of 1871-2.

SCARLATIN

SYN. Scarlet fever; scarlet rash; febris scarlatina; morbilli confluentis; rubeola rossalia; febris rubra, Heberden; febris miliaris rubra et maligna; febris anginosa miliaris, Huxham; scarlatine. French; scharlachfieber, scharlachaufschlag, German. Synonyms.

Introduction. In selecting this subject for our Thesis we are aware of our inability to do justice to the same, and do not pretend to advance any new theory concerning the treatment of this disease. Introduction.

Scarlatina is an eruptive fever, defined by Wood "a contagious febrile disease, characterized by inflammation of the fauces and a scarlet rash, appearing usually on the second day, and ending in desquamation about the 6 or 9th day." Many cases have been reported where the eruption did not appear until a much later period, owing, no doubt, to some complication or condition of the patient. Character.

Classification. It has been divided into several varieties based on differences in symptomatic characters and intensity. Classification.

Three varieties are generally recognized, viz.; Scarlatina simplex; Scarlatina anginosa; Scarlatina maligna and according to Wilson Scarlatina sine exanthemate.

Scarlatina simplex is the typical form of the disease in which the constitutional and local symptoms are moderate, and run a regular course. There is always considerable congestion of the fauces, even in the mildest form of Scarlatina; and in Scarlatina simplex there always exists a moderate amount of swelling of the mucous membrane and tonsils. This should receive the same care as the more severe forms. Scarlatina simplex.

Scarlatina anginosa is characterized by a predominance of sore throat, and is a more severe type of the disease than Scarlatina simplex. There is more constitutional disturbance, more local suffering, and an irregular eruption, deficient in amount of cutaneous congestion, and imperfect in its course. Albuminuria is more apt to exist in these cases.

Scarlatina anginosa.

Scarlatina maligna, or putrid sore throat, is a more severe form of Scarlatina anginosa, attended with extreme prostration of the nervous system, with extensive and deep ulceration of the fauces and adjacent parts. The eruption comes out imperfectly.

Scarlatina maligna.

This form occurs most frequently when the constitution is in a morbid state, it is exceedingly dangerous, and commonly fatal. The exanthema is uncertain, irregular and incomplete, late in making its appearance, often pale and indistinct, but commonly purple or livid, and occasionally disappears in a few hours after its outbreak.

Scarlatina sine exanthemate is the fourth and last form in which we find this disease, it is occasionally met with in the course of an ordinary epidemic. The fever and sore throat are present, but there is no eruption. This form sometimes

Scarlatina sine exanthemate.

attacks the adult, or occurs in a child who has gone through the eruption in the ordinary manner; it is generally mild in its symptoms.

Anatomical Characters. — Many difficulties present themselves in determining what are the anatomical characters of Scarlatina, since so many who die of this disease have some complication, and the lesions of this are superadded to those of the fever. In many cases the brain and its membranes have been found to be congested. Inflammation of the lungs has been found in some post-mortems. Anatomical characters. The Brain. Lungs.

The intestinal mucous membrane participates in a high degree, especially at the commencement of desquamation, at which period profuse intestinal catarrh comes on. Intestinal mucous membrane.

"Dr. T. Jenwick concludes that there is inflammation of the mucous membrane of the stomach and intestines like that of the skin." Stomach

This statement has to be more fully proven before we finally accept it. The Peyerian, solitary, and mesenteric glands are enlarged. The Peyer's glands.

spleen is often enlarged and softened. Spleen.

The Liver does not present any notable changes. Liver

The Kidneys are often affected during convales- Kidneys

[cence

in some epidemics it occurs very rarely in the disease; in others it is hardly observed at all.

Clinical History. The symptomatic events of the several stages will be first noticed, and, afterwards the anomalous events and complications liable to occur in either of the three stages into which we shall divide the progress of this disease. Clinical history.

1.) Stage of Incubation or Premonition. Sometimes the attack is ushered in with a chill but very frequently Scarlatina begins abruptly and the premonitory symptoms are wanting. Stage of incubation

With or without the chilling, fever, usually intense, arises, accompanied by such symptoms as generally occur in a febrile state of the system, such as headache, perhaps delirium, coma, and thirst.

The temperature of the skin is considerably heightened, the breath is hot; the pulse rises to 110, 120, or more, per minute; the eyes are bright, and occasionally more or less suffused. Epistaxis is not uncommon in this stage. Vomiting occurs in most cases within the first thirty-six hours; it commonly comes on before the appearance of the rash but not always. It is supposed to be

Temperature.

Pulse

Eyes.

Epistaxis

Vomiting

sympathetic due to the effect of the specific virus on the brain. The bowels are often slightly constipated, at other times diarrhoea occurs. The average duration of this stage lasts from 6 to 48 hours or at most 3 days, when the eruption begins to show itself. When it is much prolonged it shows some complication generally.

Bowels

duration

(2) Stage of eruption and florescence. The eruption is first observed about the ears, neck and shoulders in reddish rather indistinct patches. This stage is often ushered in by restlessness, anxiety, convulsions and sometimes

Stage of eruption

duration; these symptoms are relieved by the appearance of the eruption.

The rash of Scarlatina resembles that produced by a Sinapism. It is composed of minute punctæ and lineæ, united by a superficial effusion; the suffusion on face and limbs is uniform, but irregular on the trunk, more vivid on the hand, the nails, and around the joints than elsewhere. Sometimes, and constantly in certain regions of the body, the rash is smooth, from the presence of a moderate degree of oedema of the skin; at other times, even in other situations, it is rough and papular. The rash disappears

The rash.

by pressure, but in robust children, and in favorable cases, it immediately returns when the pressure is removed; slow return of the exanthemate is evidence of sluggish circulation, and, when well marked, it indicates a malignant form of the disease. When the rash does not uniformly cover the entire body, and occurs in the form of large red spots upon white, then this is described as Scarlatina varigata; but when the entire body is reddened it is known as Scarlatina levigata. "The child is said to be as red as boiled lobster;" The exanthema is darkest during bodily exercise,

or crying, and must intend when the child is uncovered and bares out.

Pharyngitis has already commenced with a degree of Stomatitis and Tonsillitis. Deglutition is very painful. This state of the buccal and faucial membrane continues through the disease. The tongue is covered with a moist fur; its root and centre are covered white, its borders and apex colored dark red, the papillæ filiformes are slightly swollen, and give it a granular appearance; occasionally the papillæ are so swollen, that they also project backward like red points, where the white fur has already formed, and thus make

Pharyngitis
Stomatitis
Tonsillitis.

The tongue.

the tongue appear more villous.
During the first days the temperature
of the skin is very high, ranging from
102° to 107° Fahr. The stage of eruption
generally lasts from three to six days duration.
when the fever begins to abate, the
heat becomes less, and the rash fades.
There is a gradual decline of the disease;
the patient in about the second
week loses that redness which was
so characteristic of the first stages,
it can be aroused, and calls for
nourishment.

3d Stage of desquamation. The erup- Stage of desquamation.
tion begins to fade on those places
where it was first observed, on

the neck and breast, and disappears
gradually from the lumbar region and
inner surfaces of the thighs. Then
comes the exfoliation of the epidermis over
the entire body; previous to this the
child is troubled by a severe itching,
after which the skin becomes cracked
ed, and it throws off in large
scales. Occasionally the skin of the hand
can be pulled off almost entire like
a glove. Sometimes several successive
exfoliations occur. A similar desqua-
mation also takes place on the
mucous membranes. The patients
expectorate a horrid phlegm, the expectoration
tongue likewise casts off its epithe- tongue
lium; the urine becomes opaque and urine.

contains large quantities of epithelium. Pustules several large, recumbent stools, of a putrid, penetrating odor, are also evacuated. The desquamation usually begins immediately after the rash has begun to fade, but may be retarded for twelve to fifteen days.

Such are the symptoms of legitimate Scarlatina, in which the course of the disease is regular. Certain cases are characterized by extreme severity at the outset. The pulse may rise as high as 140 or 160, per minute. There may be delirium, coma, convulsions, or other severe symptoms. Death may take place

before the eruption appears, or inflammation of Pharynx occurs.

Complications. — Some cases are characterized by a great amount of throat affection. The exudation is profuse, the tonsils are much swollen; the inflammation may extend to the anterior and posterior nares, and acrid pus flows from the nose, excoriating the face. In rare cases the inflammation extends into the larynx and bronchial tubes. It is liable to extend through the Eustachian tube into the internal ear, the tympanum may be perforated and the ossicles

Complications.

Throat.

Tonsils.

Larynx.

Eustachian Tube.

Tympanum

discharged through the external meatus. Permanent deafness, facial paralysis are effects of an extension of the local inflammation to the internal ear. Albuminuria is more apt to exist in Scarlatina anginosa than in the other forms. Hemorrhage from various situations, together with petechiae and vibices on the skin characterize certain cases. An occasional result of severe pharyngitis in Scarlatina is gangrene occuring in the subcutaneous cellular tissue of the neck; it indicates an intense grade of inflammation, or a low vitality, and although it is a very serious affection, still

Albuminuria.

Hemorrhage.

Gangrene.

many recover through a protracted convalescence. If it be epidemic, it may so increase the debility that death occurs in consequence. The areolar tissue is the part which first sloughs. The skin over the gangrene becomes brown or dark, and seperates with the slough, which in the majority of cases is not large. Sometimes it sloughs so deeply that when it seperates, the muscles and even the vessels of the part are laid bare. Gangrene of the mouth, also, occurs in rare instances

Rheumatism is a not infrequent complication especially the articular variety; it occurs when Rheumatism

the fever begins to decline. There is but little swelling or redness. The most common seat is the wrist. Serous inflammation, particularly that affecting the peritoneum, pleura, or pericardium is a very common complication, independent of the rheumatic affection. It occurs during the defervescence period, and may continue, and become a sequel. Pericarditis if slight is discovered with great difficulty, it is often attended by only a small amount of effusion. Pleuritis may be subacute, but the patient may recover after a protracted convalescence. Peritonitis has been discovered in some cases. Pericarditis. Pleuritis. Peritonitis.

Sequelæ. The complications before named may occur as sequelæ, but there is another pathological state which is not often a complication, but is a common sequel viz., Nephritis with albuminuria. This commences about three weeks after the disappearance of the eruption. It is sometimes called, acute desquamative nephritis. There is hyperæmia, and increase in volume of the kidneys; a granular deposit in the renal epithelial cells, an escape of albumen from the enlarged capillaries, and its appearance in the urine; tube casts are formed in the tubuli uriniferi; there also

Sequelæ.

Nephritis.

amount of urea ejected, and, therefore it accumulates in the blood; and finally, rupture of the engorged capillaries of the kidneys, and mingling of the elements of the blood with the urine. Anasarca is the manner in which it generally shows itself, occurring upon the face and limbs and sometimes in the areolar tissue of the trunk. Effusion occurs into the serous cavities if the anasarca be considerable. Hydrothorax sometimes exists to such an extent as to seriously embarrass respiration. The opinion is held by some writers that the kidneys are oftener affected after mild than in severe cases of scarlatina.

Anasarca

Hydrothorax.

Otorrhœa is a frequent sequel of Scarlatina. It sometimes occurs as a complication in the last stages of the fever. It often causes a deafness, which will gradually pass away if the discharge is without the tympanum. A thin purulent discharge may remain for months or years. The inflammation may extend inward and destroy the temporal bone by producing caries of the petrous portion. In rare cases the inflammation is said to have caused thickening and bulging of the walls of the sinuses, and partial obstruction to the circulation, congestion in the veins, the formation of thrombi, and finally, coma and death

Otorrhœa.

Causation. The communicability of Causation is no longer doubted, and it is probable that its causation always involves infection. The cases reported where it arises spontaneously are uncertain, but if it ever does occur, the instances are extremely rare. It generally travels through a community as an epidemic. The infectious distance is short according to "J. Lewis Smith" not more than two to three yards. The rules that he can trace mainly all the cases to the public schools. Physicians, and nurses are often the medium of communication. Prof. J. L. Smith mentions a case where a

medical friend of his went directly from some children he had been attending with Scarlatina, to another family, where he took up a little girl upon his knee. This child died in a few days from Scarlatina. Mason Good cites a case where a boy's toys was the medium of communication. The virus may remain for weeks in garments without losing its effectiveness.

Scarlatina occurs most frequently between the ages of three and ten years. It is rarely seen under one year, and infants under three months are said to have been exposed to the virus without taking the disease. Most adults

possess are immunity from this dis
ease, even if not protected by an
attack of it in childhood. Parturient
women, are liable to it, and there is
great danger that the physicians
who attend them; if at the same time
visiting cases of Scarlatina, may
communicate the disease to them.
As a rule it is never experienced but
once; but there are a number of ex
ceptions recorded

Diagnosis. — We will give a few diag- Diagnosis.
nostic points which are valuable. The
short duration of the stage of invasion,
intensity of febrile movement, the
high temperature, the pulse as high

as 115, the acute congestion of the face prior to the eruption, the early development of the exanthem, and the decidedly scarlet hue, also the diffused or patchy character of the rash. It is distinguished from rubeola by absence of coryza and catarrh, also the different color of the eruption, the papular elevations upon the tongue, and the minute papulae upon the skin. In Scarlatina there is a serious sickness from the first. Scarlatina and measles may occur together but such a complication is rare. Abnormal Scarlatina is the most difficult to diagnose. In cases of doubt it is much

better and safer to adopt such hygienic management as is appropriate to this disease.

Prognosis. Cerebritis is always grave; if not in its immediate symptoms, it is so in the liability to disease of important internal organs. There is no complaint in which the result is more uncertain than in this. The mildest cases often assume a most malignant character, and patients often suddenly die, when supposed to be entirely free from danger, while on the other hand the seemingly most desperate cases turn out favorable. The mortality varies greatly in different

epidemics. The d/s is much greater in the city than in the country; in hospital than in private prac tice. Rellet and Barthe, in hospital practice, lost forty six out of eighty seven. Acute pharyngeal inflammation greatly increases the danger. The great mortality results from nephritis. In Great Britain Scarlatina ranks second in the list of fatality of communicable diseases.

Treatment. — In consequence of the variation of the individual epidemics, it is impossible to pre scribe one system of treatment that would be applicable to all forms of

Treatment.

this disease. Scarlatina when mild requires but little treatment, that is when it is without any complication. A gentle cathartic as citrate of Magnesia should be given, also a diaphoretic as the following. ℞. Spts. æther nitr., Syr. ipecac., āā ℥ ij. Syr. simplic ℥ j. Ad. S. Teaspoonful every 3 hours. The patient should be put to bed; he should be kept quiet; the bed-clothes should be light, but sufficient; the room darkened, kept at a reasonable temperature, and properly ventilated. Light, heat, bustle, noise, conversation, and draughts of cold air should avoided. If there is restlessness, an occasional warm-mustard foot-bath will give relief.

Diaphoretic mixture.

If there is much fever keep the bowels cool. Mild cases only require hygienic measures. The tonics, especially the chalybeates are useful. If the cases are of moderate severity Trousseau recommends cold effusions as an important part of the treatment. They should be employed in the first stages of chronic cases. Depletion is rarely called for. Use rather sustaining measures. In very robust children, in rare cases one or two leeches may be applied, to the temple, if there is any danger of dangerous cerebral congestion. The preparations of Ammonia are valuable remedies. The following is a useful formulae ℞. Ammonia Carb

Ferri et Ammonia citrat. aa ℥ ss. Syr. Simplic. ℥ ij. M. Take a teaspoonful every 3 hours for a child five years old. Sulphate Quinine or the preparations of Cinchona have been recommended. Dr. Hood employs Quinine, in doses of one or two grains every four or six hours. He combines the Quinine with 8 to 10 minims of dilute Sulphuric acid and ℥ ss of comp. tinct. of bark or orange peel. He always evacuates the bowels first. The best palliative for the itching of the skin is fresh lard. A more agreeable ointment is the following formulae; — ℞. Glycerinae ℥ j Ung. aq. rosae ℥ j. M. Rub the parts well with this ointment, with the palm of the hand or a piece of old linen.

Sponging with warm vinegar is ~~recovered~~ recommended by some practitioners; Prof. Wilson prefers a tepid solution of ammonia. Dr Hastings has used the following successfully; ℞. Glycerine and cologne water, one part of the former to four parts of the latter. When the rash is indistinct the general warm bath should be used, enough mustard should be added to cause some irritation to the surface. Some physicians employ belladonna for the same purpose.

The sore throat is most always very troublesome. Every writer has a treatment of his own, which he uses with great success. Prof. S. S. Smith

Pharyngitis.

has succeeded in most cases, by using the following treatment. Take a slice of salt pork, cut as thin as possible, and stitched on a single thickness of muslin; the pork must extend from ear to ear. He advises the sprinkling of salt, or salt and pulv. camphor upon the pork in order to secure a more prompt effect. The surface generally reddens in twenty four hours, and by the second day, an inflamed eruption appears upon the part covered by the pork. He also advises gargles, if the patient is able to use them, as, Potas Chloras, or one of the astringent preparations of iron. Dr Lyons uses Potas. Chloras and

Tinct. ferri. chloridi. He also uses the chlorate of Quinia in solution, with a little perchloric acid. Prof. Wilson paints the throat with. comp. tinct. iodine. He also recommends as gurgles, sulphuric acid, common salt, chlorate of potash, permanganate of potash, the hypochlorate of Ammoniac &c. He advocates the use of the solid Argent. Nitras. Watson uses the chlorine mixture. Inhalations of steam are sometimes beneficial. The best treatment is the application of a strong solution of Nitrate of Silver to the affected part.

Restlessness, and vigilance may

require anodyne remedies. Dovers powders may be beneficially used. Prof Flint recommends Belladonnae and Hyoscyamus.

Diet should be nutritious, as, animal broths, milk porridge &c. Dr Hood uses a liquid diet, the chief support being milk, sopped bread, and beef tea. He prohibits solid food until the tongue is clean, and has remained so for a few days. He allows wine in the malignant form. Diet

Where there is diarrhoea, constipating soups, and mucilagenous drinks should be given. Diarrhoea.

Threatening cerebral symptoms, delerium, stupor &c are treated by Delerium &c.

cold applications to the closely shorn head. Convulsions are to be treated by purging with calomel. A physician of this city, had three cases of Scarlatina in the same family; in two cases convulsions took place which were effectually stopped by purgation with calomel. Trousseau extols compression of the carotids, as highly efficacious in arresting convulsions, The nephritic affection is often more severe and dangerous than the primary disease itself. Diuretics which stimulate the kidneys should not be given because there is active hyperaemia of these organs, having in many cases an inflammatory

Convulsion.

Nephritis.

character. As the eliminative functions of the skin, and of the intestinal mucous surfaces are, to a great extent, vicarious with that of the kidneys, diaphoretic and purgative medicines are required. Foot-baths or warm general baths are useful. The best diaphoretics are, acetate of ammonia and potash, the bitartrate and citrate of potassa. Spt. aether. nitrici is an excellent preparation. Prof. E. Wilson uses a combination of bitartrate of potash with Liq. acetat. Ammon. and digitalis; he also gives saline purgatives at the same time.

Uraemia resulting from Scarlatina is best treated by hydrogogue cathartics. Uraemia.

A mixture of jalap and cream of tartar, or the "pulvis jalapæ compositus" of the Pharmacopœia. Tinct. Colchici is highly recommended. The physician must vary the treatment according to the state of the patient.

Convalescence. During convalescence every precaution should be taken to prevent the patient's taking cold. He should not be allowed to go out under two or three weeks, especially in bad weather. Flannel worn near the skin diminishes the liability to nephritis and uræmia.

Preventive measures. It has been claimed by some writers that Belladonna has a preventive influence

over Scarlatina, but it has not proven itself to be correct. Hufeland used the following formulae. ℞. Ext belladon gr xij, Alcohol ℥ss. Aq. distill ℥iij. S. One to three drops morning and evening.

There are many who hold a different opinion of this disease both in its character and treatment; which has not been fully sustained.

Wm. A. B. Sellman.

An Inaugural Dissertation on
Acute Lobar Pneumonitis
Respectfully submitted to the
Examination of the
Dean and Faculty of the
University of Maryland.

By

Alexander H. McKenzie
of South Carolina.

Session 1871-2.

Pneumonitis

Pneumonitis is derived from the words
Pneumon, the lung, and -itis, inflamation
signifying inflamation of the lung substance
or parenchyma; these are composed of air-
cells, vesicles or alveoli, together with the
bronchioles or terminal bronchial branches.
These are lined by a membrane differing
materially from the membrane lining
the bronchial Tubes, Viz., by its Tenuity,
absence of mucous follicles, and by a
change of epithelium from the cylindrical
and ciliated to the squamous, pavement
or tesellated variety. The difference in the
structure of the two membranes, with the
difference of their function, will serve to
account for the fact, that the inflamation

pneumonitis may be limited to the
pulmonary substance, and, also the fact
that in bronchitis it does not extend to
the pulmonary parenchyma.
Inflamation of a structure, as a rule, does
not extend to another structure however
contiguous, which has important anatomical
differences or which differs as regards its
function; also that the membrane lining
the air-cells is not, strictly speaking a
mucous membrane will account for the
inflamation in pneumonitis, when com-
pared with bronchitis and other mucous
inflamations. When not developed as a com-
plication, it usually affects an entire lobe, and
is termed lobar pneumonitis.

Acute Lobar Pneumonitis

Anatomical Character.

The lungs are the essential organs of respiration, and are divided into two parts lying on each side of the lateral cavities of the chest separated from each other by the heart, and other contents of the Mediastinum. Each lung is conical in shape, and have an apex, base, two borders, and two surfaces. Each lung is divided into lobes by deep fissures. The right lung is thicker, shorter and broader than the left, and has three lobes while the left has two. Its root is connected to the heart and trachea a little above the middle of the inner surface of each lung, nearer to posterior than anterior border.

The lung in its healthy state is a gray

ale color, mottled in patches, and as age
advances assumes a black color, On per-
cussion a clear sound is heard and is
called the vasicular or natural respiratory
murmer, and represented by some authors
as being similar to the sound of a
soft breeze through the tops of trees.
They do not sink when thrown in water.
When diseased, dullness on percussion.
On auscultation a resinous sound is
heard, with crepitant rale indicating first
stage of pneumonia, also subcrepitant rale
indicating inflamation of the mucous Membrane
lining the bronchial tubes leading to and through
that portion of the lung affected. Cough
pain in affected side, difficult breathing

hen the expectoration is well marked, it
s a transparent, tawny or rust colored sputa,
d of such viscidity as to stick to the bottom
d sides of a vessel without falling out when
ned bottom upwards. when firmly united,
Watson says. In the majority of cases the
mmencement of inflamation of the lung is
arked by shivering followed by heat and increased
equency of pulse. Dr. Flint says The first ap-
eciable change resulting from acute inflamation
the same here as in other situation Viz., an ab-
ormal accumulation of blood or hyperemia, due to
tive conjestion or engorgement. Some have more
ifficult breathing than others with less portion of lung
ected, from deformity or injuries of the chest.
ause not sufficient oxygen to oxygenize the venous blood.

Clinical History.

Pneumonitis is divided into Three Stages Viz:, The first or that of engorgement exist when the lobe in a state of active Congestion or engorgement. The second, when the affected lobe or a greater part of the lobe becomes solidified by the inflamatory exudation, and is Called the Stage of solidification or hepatization. The Third Stage the affected lobe is in one or two conditions. If the disease persues a favorable course, absorption of the exuded matter is going on, and Convalescence takes place. This is Called the Stage of resolution. But if on the Contrary, the Stage is one of suppuration or infiltration, the disease generally ends fatally.

In each of these stages the duration varies much in different cases; they may last for a few hours in some, and in others for days, if in death, generally in a few days. but recovery, weeks may elapse before the normal condition is restored. Active or acute pneumonitis by active energetic treatment may be removed in a few days or much. or so to prevent the second stage of the disease. Pneumonitis generally attacks the lower lobe of the right lung. and posterior surface most generally. Chlorides frequently are diminished until resolution begins (in the urine). Pleuritis, Pericarditis Delerium, slight jaundice & fever in malarious districts &c occurs as complication.

Pathological Character.

Acute pneumonitis is an inflamation affecting a structure recived as a mucous tissue, and is removed by absorption, and sometimes absorbed very rapidly. This exudation consist of blood in serum - which being infiltrated to the areola tissue around the air-vesicles, and the minute ramification of the bronchial tubes leading to them, increases the prefsure of the same, and thereby diminishes their capacity to hold their normal quantity of air - leading to an imperfect oxidation of the venous blood., hence the hurried respiration. The hastened effort of nature to compensate

by increase action for the deficient
epidation consequent upon the
mechanical pressure upon those im-
portant part of the breathing machine.
Inf. which says the exudation in
pneumonitis, doubtless comes from
the blood circulating in the branches
of the pulmonary Artery.

Causation.

No period of life involves either exemption from or a notable proclivity to, acute lobar pneumonitis. It occurs more in males than females. also those who works out doors than those who do not. The attack is generally due to some sudden exposure. working in the wet and cold, sleeping out doors at night continued application of cold wet clothes to the body after a days hard work is a great cause, for it seldom attacks those who do work in water all day provided they remove the wet clothes. and put on dry ones at night. It occurs in some years more than others. in winter than Summer &c.

Diagnosis

In some cases, acute pneumonitis is accompanied by symptoms which are highly distinctive. If the patient take a chill followed by febrile movement, pleuritic stitch in a circumscribe place near the nipple, and the rusty expectoration occur, we may make our diagnosis without the aid of any physical signs, but we do not always have those symptoms. With the aid of signs in a great many cases we can make our diagnosis without difficulty. In the first stages, slight or moderate dulness on percussion and crepitant rale. The latter if well marked is almost a sure sign. Care must be taken not to confound the two rales together.

The Crepitant rale is distinguished by its fineness, dryness, and limitation to inspiration; while the Subcrepitant, however fine, is of a moist bubbling sound, and heard in both inspiration and expiration; these two rales sometimes exist together. The crepitant rale is not always present, and when not, a positive diagnosis cannot be made, also dullness on percussion is more marked. In the second stage. Bronchial respiration, bronchophony and whispering bronchophony are signs of solidification. They are at first manifested over a portion of the lobe affected, and are then diffused over its whole extent, either quickly or gradually. The solidification of the lobe ... takes place

These signs are generally present it is rare they are absent, all of them. Dullness on percussion is now marked, amounting, perhaps nearly or quite to flatness. In the commencement of resolution the bronchial respiration gives place to the bronco-vesicular, and the latter progressively approaches more and more to the normal vesicular murmur, then dullness on percussion becomes less marked.

During the progress of resolution, the subcrepitant rale is frequently heard. The 3rd stage that of grey hepatization the pus becomes infiltrated not only into the air cells, but also into the areola tissue, forming small subscribed abscesses,

which coalescing with each other
ultimately form one or more large abscess,
and should then be emptied by ex
pectoration. Then we will find a
cavity in the place formerly occupied
by that pus (called Vomica), and which
is manifested by a physical sign
(the amphoric sound) which resembles
the blowing of air into a bottle.
The dullness or flatness, continues,
and the moist bronchial rales
due to pus in the air tubes are
prominent.

Prognosis.

The prognosis in acute pneumonitis will depend upon the amount of lung involved, the disease with which it is complicated as an intercurrent affection, complication and the previous constitution of the patient. Cases may differ as they may present different forms of disease. Occurring as a primary disease, uncomplicated, and in a person affected previously in good health the tendency is to recovery, even if more than one lobe be involved, when not enfeebled by age, or other causes,

Prof. Hinds says, I have known recovery to take place in a case in which an entire lung was involved, and the patient situated

under a favorable hygenic circumstances
as could well be imagined.
Complicated with fever, Measles and
Heart disease, also Bronchitis, Peri-
carditis Delirium Tremens &c it is
likely to prove fatal, especially if more
than one lobe be involved.
Unfavorable symptoms, Quick and
weak pulse, labored respiration, lividity of
face, an abundant purulent or muco purulent
expectoration; dark colored sputa; low
muttering delirium, and subsultus tendinum
constituting the typhoid state. Death
purely by apnoea may occur if two or
three lobes be involved rapidly, but this
occurrence is rare.

Treatment

The a general rule bloodletting is not a safe and judicious practice in the treatment of this Disease; but in the first stage, in a robust patient attended by a full bounding pulse, hot dry skin, labored and hurried respiration, with expectoration of frothy mucous, colored with blood, the abstraction of blood from the arm with a large orifice and the patient in a sitting position will certainly modify and ameliorate all the symptoms of the Disease, and make it more amenable to the remedies which may be used in after treatment. Even the abstraction of blood by cupping over the diseased region will have a happy

fect in ameliorating the disease in a
ntient somewhat enfeebled by disease.
pletory measures should not be used after
ordletting. By depletory measures we do
ot impoverish the blood as in bloodletting
at is saline purgatives and diaphoretics
medies conjoined with restricted injection
food and liquids. The frequency and force
the hearts action may be affected by
useant sedatives, such as tartar emetic
picac &c. and by direct sedatives viz.
Vinum Digitalis, Aconite and Veratrum
iride. Also in the first stage use
emedies to act upon the circulation
Stimulating remedies, Sinapism Terpentine
Tupes & Warm fomentations.

Second Stage.

The treatment in this stage has reference to the promotion of nutrition, palliation of symptoms, and supporting the powers of the system. Bloodletting and depletion by means of salines are by no means called for. Repeated application of the Tinct Iodine is a good counter irritant if any be desirable. Blisters interfere with the examination of the chest. Oiled muslin jacket is good, keeping the surface moistened with perspiration, and if a flannel covering is added all the advantages of a poultice or water dreping are thereby secured. If pain or soreness continue in this

tage, slopes with warm water only, with some stimulating liquid or the pirits of Terpentine will afford relief. The latter should not be used if the pirit of Iodine has been applied.
Opium is also valuable this stage.
Remedies to promote expectoration, as a rule are not called for. Sedative remedies such as tartar emetic, in small doses Aconite, and Veratrum Viride are useful in this stage; if there be considerable or high febrile movement without a tendency to Asthma.
To support the power of life is the leading general indication in this stage. The indication for supporting

measures as regards urgency,
ries much in different cases.
e supporting treatment embraces
nics remedies, Alcoholic Stimulants
nd nutritious diet. Alcoholic Stim-
lants being a Hydro-Carbon, not
nly is food to the patient in this stage
f disease, but they also keep up the
nimal heat. Being taken up into
irculation and passing to the lungs, the
ydrogen of the Hydro-carbon becomes con-
rted into water vapor by union with
h oxygen which is expired. The Carbon
f the Hydro Carbon becomes connected
union with the oxygen into Car-
ic acid gas., and is expired.

with the vapor above mentioned.
The remainder of the Hydro-Carbon
not thus oxydized or burnt out, passes to
other parts, where by Chemical or Vital
affinity it deposits its Carbon in the form
of fat, thus supplying the waste in the
system produced by disease. During
this Chemical action going on between
the oxygen of the Atmosphere and the
Hydrogen and Carbon of the Hydro-Carbon
the blood that is evolved thus supplys
the patient with that due of warmth
which is essential to health and
vitality. Of the Tonic remedies
Quinine is preferred. Alimentation is an
essential part of the supporting treatment

Pneumonitis associated
with intermittent fever Quinia should be
given promptly, and in efficient doses.
When complicated with Delerium Tremens
it calls for a pretty free use of Opium
with Alcoholic Stimulants and a
nutritious diet. Those treatments are
applicable during the progress of
resolution, until the improvement in
the local and general symptoms, in con-
nection with the physical signs denote the
convalescence, then there is little or no danger
of renewed attack. If the disease proceed to
the Suppurative Stage, purulent matter
being either infiltrated or forming abscesses
the prognosis is very unfavorable.

but perseverance in the employment of
supporting measures, is sometimes use-
ful. Prof. Flint says It may be
added, that timely and efficient sup-
port probably affords the best security
against suppuration, which happily
is extremely rare.
I am aware that I have left out
a great many things connected with
Pneumonitis, but beleive I have written
what is really necessary, Therefore I
respectfully submit what I have said
to the Dean and Faculty of the University
of Maryland, for their Consideration.

AN

Inaugural Dissertation

ON

Acute Lobar Pneumonia.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Franck Hyatt

Of

Maryland

Session of *1871 & 1872*

Acute Lobar Pneumonia

By Pneumonia is meant, an inflammation of the parenchymatous structure of the lung; and by the parenchyma we understand the air cells, with the terminal branches of the Bronchial tubes. The membrane by which they are lined, has no mucous follicles; therefore it is not properly a mucous membrane. Its Epithelium is of the squamous kind. Lobar Pneumonia is where the inflammation occupies a lobe; in contra distinction to Lobular, which is where it

attacks only one of the lobes.

Anatomical Characters.

At first the lungs are capillaries are engorged with blood, the affected part of the lung is heavier, and less crepitant than in health, but will still float in water. If it be cut, blood and a serous liquid will flow or exude. After this stage, which does not last long, there is an exudation, which makes the lung have an apparently solid condition. It is now very greatly increased in weight, is

friable, and sinks in water.
A cut surface of it is seen
to be granular. These granulations
are red, generally round, and
are difficult to isolate. As the
disease pursues an unfavorable
course, the exudation matter
is not removed by absorption
and we have "purulent infiltration"
that is, the diseased part is
filled with purulent matter.
This state has been called
Grey Hepatization. The substance
of the lung easily breaks down
on pressure. Circumscribed
abscess is present in most

of the case, but the extension is
usually wanting. There is also,
as a rule, inflammation of
the Bronchi within the affected
lobe or lobes. Pneumonia most
often commences in the
posterior inferior portion of the
right lobe, and extends over
it; but other lobes may be
attacked in succession. It
is Bilateral oftener in children
than in adults.

Clinical History.

This disease has been divided
into three stages. The first is
called the stage of engorgement,

which may last only several hours, but it generally occupies from 24 to 48 hours. The second stage is that of Red hepatization (Laennec), or red softening (Andral); its duration in the majority of cases, is about 2, 3 or 4 days, but it is sometimes less. The third stage is called that of resolution, if it tends to a favorable termination; or stage of Grey hepatization, or purulent infiltration, if the disease still advances. Absorption of the exudation

may occupy two or three weeks
or it may be completed in
4 or 5 days. Death generally
occurs within several days
after Commencement of Resolution; but
if it terminates in recovery,
it requires weeks before the
Lung is brought back to its
normal state. On various
times that recovery after
there is diffuse Suppuration
is impossible; but I do
not doubt that it may take
place when there is merely
circumscribed abscess.
Symptoms - Acute Pneumonia is

generally ushered in by a chill. The skin is hot and dry, but the heat is unequal in different parts. It is more apt to occur during the night than the day. As a rule, just after the chill the patient experiences a sharp, lancinating pain in the affected side, generally at a point near the nipple; but it may exist in almost any part of the chest, or may be entirely absent. The pulse is full, hard and varies from 80 to 120 beats per minute; in grave

it may go to 160 or 170. Respiration is hurried and labored, the respiratory acts in grave cases amounting sometimes to 60 or 70. The pulse and respiration are out of proportion. There is usually cough, which is attended with pain. The sputa though at first transparent, often assumes after a short time a yellowish brown or brick dust color, and is very adhesive. It is called the "prune juice expectoration" where it is mixed with a quantity of dark blood. The

expectoration though is not always present. After the second stage is reached the cough is not so painful, and the sputa becomes more abundant, opaque, and loses its characteristic color. The fever is not so high, but the respirations are still very frequent. The pulse is apt to be small in the stage, whereas it was full in the first. When resorption commences, the initial phenomena diminish, the expectoration becomes less, the appetite is regained, and

convalescence is soon established. If the disease passes into the stage of purulent infiltration, the symptoms become grave. The expectoration is purulent, the face is very pale and puffy, and the respirations are increased in frequency. During the time, from the beginning of the second stage to the commencement of resolution, the Chlorides are either absent, or decreased in amount in the Urine. If there is much albumen in the Urine, it is a sign of some

disease of the kidneys. In Cremonia there is not infrequently seen on one, and sometimes both cheeks, a circumscribed redness. Gangrene is extremely rare, having occurred according to statistics collected by Dr. Flint, only once in 133 cases. In malarious regions it is often impressed by the malarial law; there are remissions and exacerbations. The first few exacerbations may be heralded by a chill, or there may be only a coldness. The remissions are almost always occur in the morning.

Bronchitis, Pleurisy and Pericar-
-ditis are some of the complications.
The average duration of
Pneumonia is said to be
from 10 to 14 days. I will
mention the Physical signs
when I come to speak of
the diagnosis.
Causation. In some cases the
cause cannot be determined.
Exposure to cold and vicissi-
-tudes of temperature, sometimes
bring on an attack. It
occurs oftenest during the
first six months of life
years and attacks males

more frequently than females.
It occasionally exists as an epidemic, especially in some of the southern states. It is most frequent between the ages of 20 and 30 years. An influence is also exercised by predisposition.

Diagnosis. Were it not for the physical signs, Pneumonia would sometimes not be detected, for the general signs denoting it are sometimes absent. As a general rule though, its onset is denoted by a chill; then fever; pulse

and respiration hurried, acute circumscribed pain in the chest, and dry cough. The expectoration is considered pathognomonic.

Physical Signs. In the first stage of the inflammation there is a slight dullness on percussion. Auscultation reveals very minute and fine crepitation in a limited spot in the beginning, which obscures the natural vesicular sound. This is a dry Rale, is heard only during inspiration, and does not continue for any

length of time in one place.
If resolution takes place, it
is followed by the natural
murmur. When the lung
is splenized, there is Bronchial
respiration and Bronchophony
and also dulness on percus-
sion. Subcrepitant rales are
very often heard during the
stage of resolution, and the
dulness elicited by percussion
gradually diminishes. Cavernous
respiration is heard, if there
is an abscess and the
pus be discharged into
the Bronchial tubes.

Prognosis. The prognosis is modified by age, sex, state of health, and constitution. In infants and after the age of 70 it is said to be fatal. It is said to be less grave in females than in males. The danger is also modified by the prevailing type. When complicated with Pericarditis or Intermittent Fever, the fatality is greatly augmented. Simple, uncomplicated Pneumonia in a previously healthy person, is not considered

very dangerous.

Treatment. Bloodletting is unnecessary, and is not to be resorted to except in a very few cases. It is only to be employed in the first stage. Dr. Flint says, "bleeding is warranted when there exists high symptomatic fever, the pulse denoting increased power of the heart's action; the patient robust and in good health when attacked, and the disease not involving danger of death by asthenia". Even Dr. Bennett thinks it is

admissable in these cases.
In the majority of instances
though, as good effects can
be secured by saline Cathartics
and Sedatives. Among the
Sedatives Tartar Emetic and
Veratrum Viride are about
the best. Tartar Emetic is
indicated when the skin is
hot and dry, and the Pulse
of good volume and strength.
Opium is given to relieve
the Pain, and ales for
the cough which is sometimes
very harassing. Sinapisms,
Warm fomentations, dry cups,

& and Liniments are useful in the treatment. In the second stage, may use Iodine as a counter irritant; paint the affected side with the tincture. Give Opium also in this stage. After all, the essential part of the treatment consists in giving nutrients and alcoholic stimulants in sufficient quantities. A milk diet from the onset, then Beef tea, Broths &c. Very large amounts of stimulants are tolerated in some cases. They are to be

used when the pulse is feeble and frequent. When complicated with Malaria, give Quinia in full doses and during the Remissions. Quiniae Sulph., Pulv. Specac. et Opii, and Spt. Nitre Dulc., makes a good combination. During Convalescence there is not much to be feared from another attack. If the disease is not arrested, but reaches the stage of suppuration, still the great indication is to support the patients powers of life by giving good nutritious food and stimu-

lancet. This treatment sometimes,
though very rarely, succeeds in
these cases.

AN

Inaugural Dissertation

ON

Cholera Infantum

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Charles Granville Stone

Of

Rockville, Montgomery Co. Md.

Session of 1871 And 1872

Cholera Infantum

This peculiar affection of Children is one calling for more extended investigation both in regard to its immediate cause, and its pathological anatomy. It seems principally to be confined to the large cities and towns, which are most thickly peopled.

Its frequency, and great fatality in this country, have made it an object of strong interest, not only in the profession, but among the people at large, so much so, that it is universally considered as meriting a separate, and distinct designation. The age most prone to this affection, appears to be, from fourth, up to the twenty fourth month of extra uterine life, rarely attacking

those under, or over that age, tho' you do see instances before, and after these two periods.

It is a disease exclusively of the warm season, and generally commencing with the first heat of summer, and ceasing upon the return of the cool days of Autumn. The principal cause of Cholera Infantum is excessive heat, and its poisonous products. It generally takes but a few days of a temperature of from eighty, to ninty five degrees, to generate this fatal affection, and spread its devastating influence through town, and city, like the destroying flames that lately swept the vast plains of the

South West. Especially is this disease persistent, and fatal during the months of July and August. Those two months are the mortal dread of mothers whose misfortune it is, to be compelled to dwell within the confines of one of our great eastern cities.

Another prolific cause of this affection, is improper diet, especially is this the case within large cities, where so very many infants are raised altogether upon artificial food, or upon the milk from cows fed on swill, or slop. In the country they are not so much exposed to this danger, - but are only too apt to be given

food which is of anything worse, such as unripe fruits or vegetables, - Apples, currants, gooseberries, and the like, all of which are most pernicious, and liable to bring on, or provoke an attack of Cholera infantum in a few hours. In large cities bad hygienic conditions, especially among the poorer classes - aids much in the generation, and promulgation of this, as well as many of the zymotic affections so common to the closed, peopled cities. Decaying organic matter, both animal, and vegetable; as bones, hides, tallow and offal-houses, neglected stables, putrescent mud, and filth, bad drainage, cesspools, Malaria, obstructed sewers, filthy streets, gutters, garbage, and cesspools.

and lastly overcrowded, and illy venti-
ated apartments.

Tis strange, yet nevertheless true, that there is a peculiar connection between the physiological process of Dentition, and the pathological condition of Cholera Infantum; so very closely are they connected, that you rarely have the complete evolution of the teeth, without more or less of choleraic symptoms, and generally this affection is one of the most fatal complications we can have. The only way by which we can intelligently account for this strange fact, is: That at this period the mucous follicles of the gastro-intestinal canal, are under-

ing children of a strumous diathesis, or those suffering from constitutional syphilis. But the primary cause yet remains to be discovered, and until then we must content ourselves with conjectures,—

Anatomical Lesions.

We now come to consider the morbid anatomy of this affection, which appears in the majority of cases, of a mild character - but few, and in a great number, no abnormal phenomena are discoverable with the unaided eye. When found, they appear to be principally the enlargement of the mucous follicles, and the glands of Peyers. In most of those cases examined, where any lesions have been observed there seemed

to be softening of the mucous-membrane, accompanied in some instances by an exythematous inflammation, with rapid proliferation, and exfoliation, of the epithelial cells. The most constant change is in the excessive development of the follicular apparatus of the stomach, and intestinal tract; these may be found in protracted or violent attacks, to be very much congested, inflammed, or even ulcerated; usually these changes take place first in the large intestines, then in the smaller, and lastly in the stomach.

It was thought for a long time that the liver was the principal seat of the disease, but this has been clearly disproved

by the results obtained by Dr. J. Lewis Smith
of N.Y. who found very little change
either in size or structure of this organ.
Out of thirteen cases examined by
himself, only in one case did he find
any enlargement. The color varied ac-
cording to the amt. of fat present; but
this was rarely found in abnormal
amts. The green stools seen in the
earlier stages of the affection, are not
due as was at one time thought, to the
excessive quantity of bile present, but
simply to the action of acid secretion
of the intestinal mucous membrane
upon the bile whilst passing over
its surface. The lungs may be congested,
or we may have hypostatic pneumonia

from the long, and protracted dorsal decubitus;- The brain is rarely the seat of any anatomical lesion - tho' in some few instances it may be found in a state of softening - and you have then in long continued cases, a spurious hydrocephalus, or an effusion within the ventricles and the Subarachnoid Space.

Symptoms &c.

The invasion may be sudden, the child appearing perfectly well, when all of a sudden it is taken with violent fits of vomiting, with choleraic diarrhoea, or it may have been suffering from a simple non-inflammatory diarrhoea when by some sudden change of temper-

stum, or some indigestable substance taken into the already over excited Stomach, it is thrown into vomiting, and purging which may continue until the little patient is exhausted before it can be arrested.

The Stools may be from the most frequent, and copious, to only moderately so, their character is not unlike water from the first. So they are thus, that frequently they run through the napkin and wet the childs clothes and bed clothing. Sometimes the stools are not so frequent, but in great quantity. The principal thing to note is the watery character, and great fluidity of the Stools.

The severity of the disease or violence of the attacke can be very well judged of by the great frequency, and liquidity, of the stools, especially if the vomiting prove persistent.

The stools may be nearly colorless, or hold in suspension small soft flocculi of fecal matter, of a yellowish or greenish color, also detached portions of mucous, which are left behind upon the napkin while the fluid portion drains away. These are at first inodorous, but again you find them yellowish, or brownish in color, and containing more feculent matter, and these are exceedingly offensive and peculiar for its extreme

fetidities - which not infrequently nauseates those present; and which is not soon forgotten by ones who ever has effected by its extreme, and characteristic odor.

The frequency of the stools varies in different cases - in a case reported by Drs. Meigs & Pepper, which proved fatal, the child had during the second night of the attack between twenty-five and thirty evacuations in the short space of twelve hours. The vomiting may precede or follow the diarrhoea, and may continue for a longer or shorter time, some instances have been known, when

this persisted until the last, and is one of the most difficult features to combat. The matter vomited, is principally the contents of the stomach at the onset of the attack, or some mucous mingled with medicines if any has been given - or it may consist of a pure mucous fluid mixed with some portion of biliary matter, this is sometimes tinted with green as is not infrequently seen in other gastro-intestinal affections. These fits of vomiting may or may not be frequent it is in some cases tho', the severest element of the disease, especially when attended with ineffectual retchings, which

ne of themselves very exhausting.
The child lies listless, and exhausted
after one of these paroxysms of
vomiting - more particularly when
they are accompanied by frequent
and large evacuations. The fever
may be markedly present from
the onset, but must not be
in a bout - The second or third day
of the attack - and generally
of a mild remittent type. The
remissions occuring in the mornings,
and the exacerbations in the even-
ings. The pulse in some cases runs
up rapidly, and varies from one
hundred and thirty, to one hundred and
fifty per minute, usually of

small volume. While the temperature in many instances remains about normal. again you may find it extremely high, even so much as one hundred and four or five degrees. The urine in these cases is always scanty, and in a great number of cases entirely suppressed. The suppression in direct ratio with the frequency of the liquid stools. Respiration is at first quite normal, but if the discharges are at all severe, it soon becomes irregular. unequal, and laborious. The child becomes irritable, peevish, extremely restless and frets, and cries, its sleep is frequently disturbed.

especially at night, it wakes often
with loud cries, and when it is
asleep, its eyes are half open,
brows contracted, and frowning. The
countenance soon becomes anxious,
and distressed, in sudden and
severe attacks, it is languid, and
subdued, pale, and contracted, the
little sufferer lies half unconscious,
and rolls its head from side to
side, at the same time produces
a chewing motion of the lower jaw,
when you see this. Prof. Howard
says "look out for cerebral trouble"
and while these symptoms should
excite the gravest apprehensions in
the minds of every rational physician,

yet it does not always indicate serious trouble about the brain. but as the above Professor justly has said to his class. "it may be due to sympathetic irritation or some slight anemia of that organ, and if you are not cautious you will mistake this condition for cerebral congestion. and if you should, and go to depleting with cold to the head, and mustard to the extremities, you will kill your patient as sure as fate." In the later stages of severe attacks, the child presents a senile appearance, its little body is rapidly wasted away, and the features become so much changed, that one

could hardly recognize in the sad
picture it now presents the late
plump and rosy child of the past
week; the eyes are sunken, the
cheek bones are prominent, the
skin lies in loose folds upon
the about bare bones beneath, the
lips in extreme cases, are half
open and frequently collect the
flies.

These are long, protracted,
and usually fatal. The pulse
grows small, and irregular, and
frequently thready, in character, the
surface is cold, the abdomen is
flaccid, and inelastic readily pinched
up between the fingers into folds, the

pulse still grows more weak and rapid, The features become more pinched, and drawn, The eyes now seem to sink into the orbits, the cheeks look like marble, and the patient passes into a quiet drowsy state; The vomiting may have ceased, but the choleraic diarrhoea persists to the end; The child now falls into a comatose, or semicomatose condition, and death occurs without a sigh.

Diagnosis.

It is hardly necessary to treat of this, since what-ever already said in speaking at length of Symptoms- for this is plain, and

inevitable if you but observe
the course of the invasion. The season
of the year, its great frequency during
the months of July and August, the
characters of the vomitings and
stools. The last certainly gives the
name of the disease at once to any
one who has witnessed an attack
of this peculiar affection. Their great
frequency, and fluidity, being mostly devoid of feculent matter, and
that extreme offensiveness which
gives them their peculiarity. The
vomiting which is always present
or may precede an attack, and
the absence of tenderness over the
abdomen upon pressure.

(X)

Prognosis.

This is very variable - If good hygienic conditions can be secured, and the following phenomena are observed, the prognosis is favorable; fever diminishes, stools be frequent and of greater consistency, vomiting arrested, the child becomes more sprightly, takes food more readily. shows a better condition of the stomach, and a return of appetite with some of its lost strength. These are all favorable signs, and generally prognosticate a happy termination of the disease. While on the other hand, if persists head symptoms. from the excessive loss of blood, this large & frequent

ero-sanguinous discharges, and the fontanelles are seen to be below the level of the surrounding surface, and skin becomes cold and moist,-while symptoms of convulsions are present or seem, these betoken a fatal end.

Treatment.

In treating this disease special attention should be paid to the hygienic condition of the patient, and without this is strictly enforced-therapeutical measures will prove worse than useless- The child if living in a city should be taken immediately to the country, if circumstances will permit,-just-as soon as warm weather sets in; and

The location should be one well elevated from the sea, or some high mountainous country. If you can not remove the child from the city, when it is to be carried out in the fresh air, during the morning and cool of the evening, to some public square, or park, or if a river runs near take it out upon the water, in a boat, or on a little excursion, either of which will have of the greatest benefit.

The sleeping apartments, whether in town or country, should be well ventilated, and capacious. The under dress of children should be looked to,

as the neglect of this may give rise to predisposing causes, or increase the liability of an attack. The best and only woollen garment that should be worn is, a light, thin, woollen gauze flannel shirt. The outer clothes should be light and wool, and made of some good conductor of heat, as linen, cotton, or any light-airy material.

Too much attention can not be paid to the diet, in this affection, or during the period of infantile life which is most prone to its attacks. If possible keep the child at the breast until after the second summer, or un-

til after the completion of the first dentition as this is of the utmost importance owing to the great fatality of this disease at that age, which as I have said in speaking of the pathology is the period of great and excessive development of the Gastro-intestinal mucous follicles which are extremely sensative to the impressions made from the ingesta of indigestable food or irritating substances of any kind.

When the mouth becomes hot and dry, give the child a drink of cool water, this is very refreshing and frequently the little creatures suffer from the oversight or neglect

of this little pet of kindness and in many cases sadly.

After the age of eight or ten months a little rice water may be given with advantage, chicken broth, as ordered in Prof. Howard's formula is one of the best, and most nutritious aliments for children of this age, or in fact for any age in which can appreciate something good to eat; The following is his formula: "Having cut the chicken up, remove all the fat and skin, then put it in a vessel, and boil with sufficient water, until the chicken is well cooked, then skim every fat that may have gathered upon the surface, add a little par-

ley and Thyme, with a small quantity of salt and pepper, then pour off the broth;" This he says will agree with the child frequently, when nothing else will, and is always very strengthing. Another excellent article in these cases, is raw beef, - first take a piece of fresh beef, and scrape the substance from it, which will be of a gelatinous character, and to this add a small quantity of salt & pepper; - But - while these articles are all good, yet nothing, can be substituted for the mothers milk, if attainable.

The therapeutical treatment of this disease is very various, and

must depend principally upon the treatment of symptoms as they arise, or present themselves;- if any irritating substance are supposed to be yet remaining after the operations of vomiting- or have not passed off in the stools,- a mild laxative should be given, caution being observed not to give any remedy which might have a tendency to increase the already existing irritability of the gastro-intestinal tract;- one of the best laxatives in these cases, is the Aromatic Spirits of Ether, in doses of teaspoonful, to which may be added two or three drams of Henry's or Husband's Magnesia. When the gums are turgid, and very

much inflammed. Cance them freely, and if there is high fever, with great heat of skin, give a tepid bath.

In cases where vomiting is frequent, and attended with much retching, appearently from some irritating substance in the stomach, give a mild emetic, such as Ipecac, or a gentle purgative, as Calomel, which is invaluable in some of these cases with excessive irritability of stomach, giving it in 1/4 to 1/2 grain doses every two hours or until the Calomel is manifestly present in the stools, or its effects; but do not give over 3 grains without intermission; If these remedies does not arrest

the vomiting, give lime water and milk, about equal proportions of each, or milk with a drop of creasote added, lemonade made quite sour, is often given pretty freely, and repeated at frequent intervals is said to be an excellent method; Soda water is very good in doses from ℥ß to ℥j, - also acetate of lead, is highly recommended by some; - The following are the principal remedies used for this disease either to check vomiting or to control the excessive cholaic diarrhoea: For vomiting Prof. Howard uses the following: R.- Plumbi Acetas gr. v, Acid. Acetic. gtt. v, Sacch. Alb. ℥j, Aquae ℥jß M. S. teaspoonful every

half hour until vomiting is arrested. The Acetate of lead can frequently be combined with advantage, with Opium;- A little ice water alone will sometimes act very promptly in checking this element of the disease, but you must not forget that frequently you may apply a Spice or mustard plaster, with great advantage, to persistent irritation of the Stomach, immediately over the epigastric region;- In treating the diarrhoeal symptoms, the principal object is to get the intestinal tract relieved of all irritating substances, then check the diarrhoea, which may readily be done with one or more of the following astringent preparations.

℞.- Tr. opii deod. gtt xvi, Creta prep. ʒi.
Tr. Rhatany ʒii, Syr. Zingiberis ʒiii, Creasote
gtt. ii, Aq. cinnamom. ʒß, Aq. Distil. ʒvii,
Ⓜ. S. teaspoonful every two or three hours,
in great irritability of the bowels. Prof. Howard
gives the following: ℞.- Ol. terebinthinae gtt. xxiv, Tr.
opii deod. gtt xii, Pulv. gum acacia, Sacch. alb.
āā ʒß, Aq. cinnamom. Aq. Menthae, āā ʒvi,
Ⓜ. S. teaspoonful every 2 or 3 hours.
Instances are not infrequently met with
where the parents or nurse will have to
take the child away, and must have some
convenient preparation to take along.
In these cases you may use the following
powder: ℞.- Creta prep. ℈ii, Pulv. Kino, gr. vi,
Pulv. g. acacia, Sacch. alb. āā ℈i, Tr. opii. deod.
gtt xii, Pulv. Myristica gr. vi, Ⓜ. Ft. charts xxii,

S. one every four hours.

If the above therapeutical remedies be judiciously, and promptly administered, and due attention paid to the hygienic conditions of the child, with proper regimen, and nursing, I think a large majority of the uncomplicated will promptly recover. 'Tis certainly a fact that many cases are cured now, that at one time would have been lost, and 'tis all due to the diligent manner, which such men as Howard, Meigs, Pepper, Smith, and West, have gone to work, by hard study and the closest application and observation that we are now able to combat

this without fatal disease with any hope of success. I must say, that there is no other branch of the science of Medicine which has proven so great a blessing to the human family as that of "Diseases of Children."

End.

AN

Inaugural Dissertation

ON

Cerebro Spinal Meningitis

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Samuel W. Selduer

Of

Baltimore Maryland

Session of 1871 and 72

As it is in accordance with the rules of the "University" that all Students or rather applicants for graduation must present to the faculty for their approbation, a thesis of their own (Students) Composition, on some subject connected with "Medical Science," I therefore propose to treat briefly of Cerebro Spinal Meningitis.

Cerebro Spinal Meningitis or as it is by some called Spotted Fever, is a rare disease, and its fatality generally great.

It is a disease which was entirely unknown to former writers on medical literature.

It is said in some works on the subject that the affection prevailed epidemically in the Eastern States, and in France, especially among the Soldiers, in the Eastern States between the years 1807 and 1816.

In our midst there are numerous old physicians to whom the disease only presented itself during the past Spring and Summer months, as an Entirely new malady.

And some of the ablest authors of our present day affirm that they have never seen a Case of the disease of which I treat, but quote their sentiments from other observers.

The disease (taking authors views) is generally fatal.

Be this as it may, I can assert from the practice of others and from Cases, which came under my own actual observation, that the disease although grave in its character is not always fatal.

And it is my firm belief that good hygienic management, and strict regulations in regard to treatment, will save from an untimely grave

fifty (50) per cent of all the cases as they present themselves to our notice.

Causation

The etiology of the disease is not well if at all understood.

It has been clearly proven by those who nursed and were exposed to the influences of the malady, that it is neither capable of being propogated by contagion nor infection.

And some authors on the subject think that the poison which gives rise to "Malaria" may have some special influence on the disease, but this hypothesis must still rest with doubt in the minds of the profession, as it is well known that Quinia which is the great sheet anchor in "Malaria" only tends to aggravate the symptoms of Cerebro Spinal Meningitis.

It is a disease which is not strictly confined to sex, but a majority of the cases occurs in males and those generally between the ages of Eight and thirty

Anatomical Characters

The title of the affection is fully expressive of its morbid anatomy.

We have inflammation with Exudation of lymph in the meninges of the Brain and Cord.

The Exudation in some cases being deposited in large quantities.

The substance of the Brain and Cord will present evidences of Congestion, being thickened, and injected, and a purulent and opague liquid is effused into the ventricles.

If blood be drawn (as we have ourselves observed) during the disease it will be found to present

the buffy Coat convincing us that fibrin is in
Excess in that fluid.

Symptoms

This affection presents various prodromic phenomena.
Among others which are Common to Encephalic
troubles, is headache and pain in the limbs.
These Symptoms are generally of short duration
and are followed by others more severe in character.
The headache becomes intolerable, chills and rigors
followed by hot skin with insatiable thirst
soon make their appearance.
The pulse is said by authors to be frequent, but
I have rarely seen it exceed 96, and in a few
instances which I had the pleasure of witnessing,
the pulse in duration was below the normal frequency.
Vomiting, and Constipation are also notable Symptoms;
among others which are no less important and

when combined with the Symptoms mentioned, tend to Confirm the diagnosis, are pain and tenderness along the Course of the Spine, with marked opisthotonus and retraction of the thighs on the abdomen.

There is a general tendency to delirium, the patient uttering Sudden and violent Screams, these being Succeeded by deep moaning Sighs.

The pupils Though not responding to light are generally dilated, and in two (2) cases, which I have observed there was a Condition closely Simulating amaurosis.

Strabismus occurs in 80 % per cent of all Cases.

Trismus in Some of its many forms also Supervenes and if found present at the onset of an attack generally Continues until a Cure is effected but may remain permanently.

Convulsions though of rare occurence at times

requires our notice.

Gastric oppression forms one of the chief Sources of distress to the patient.

A Symptom which presents itself, and one for which I have never seen any reference made, but which at any rate deserves a passing mention is the elimination of large quantities of limpid urine.

In Some cases also there is the appearance of petechiae during the disease, but this is not a Constant Symptom, and one which cannot be relied upon, in order to Establish a clear diagnosis, as in a majority of the cases the petechiae never make their appearance until death puts an end to our patients Suffering.

The vitality of the blood also becomes diminished and its nutrient properties lowered in quality

for if we make a close observation of our patient during the period of convalescence we will find numbers of furunculus covering his body.
In those cases which terminate fatally paralytic Symptoms present themselves.

Diagnosis

In the early Stages the diagnosis is not only obscure but difficult.
But as the disease progresses and Symptoms of a graver type present themselves the diagnosis becomes clear.
The main features which in this Stage tend to Establish a correct diagnosis is the violent headache, vomiting, and Constipation, pain in Spine, and tenderness to pressure, opisthotonos, strabismus, and gastric oppresion—these all Combined or Existing

seperately, cannot be mistaken for anything else.

Prognosis.

In regard to prognosis, I do not strictly agree with authors in believing that all cases must necessarily terminate fatal, but on the contrary think (and feeling myself perfectly justified in the assumption) that fifty (50) percent of all the cases if judiciously treated generally end in recovery.

But this assertion should not induce the young practitioner to be over sanguine, as surrounding circumstances greatly modify the severity of the disease.

Hygienic influences, and good nursing, with a due respect to therapeutics, are the basis of successful treatment in all diseases.

When death occurs it is due to an Entire Exhaustion of the vital powers.

Treatment

The treatment varies according to the patient under Consideration, and so great is the diversity of opinion, that the Subject has been one of marked Controversy among Physicians. The active adherents of the old School persist in the use of Calomel and Bloodletting, and advise that Calomel should be administered in large and oft repeated doses, until its constitutional effects are perceivable on the gums. They contend that if you keep up a active purgation, you remove the effusion and so cut the disease short.

This is not only injurious to our patient but highly dangerous, as we are aware that

the poison of Spotted Fever has a direct perturbating influence on the blood, and if we administer Calomel with the view of eliminating this poison (knowing that Mercury or any of its preparations are direct agents in vitiating the nutrient properties of that fluid) we not only diminish our patients chances of recovery, but instill into his System a poison of so virile effects he is not likely to overcome.

General Bloodletting is inadmissable and can only do harm, and if we bear in mind that death (when it occurs) is by asthenia then it would be well to lay general bloodletting aside, as our patient requires all the blood that his feeble organism possesses.

But I have seen vast benefit derived from local depletion by cups and should not

hesitate in their use (in a plethoric subject)
when I should have the suspicion that an over
distended or congested condition of the blood
vessels existed.
Since the discovery of "Chloral" physicians
seem to use it entirely in reliving some of the
distressing symptoms of this disease, and in
fact some think it possesses as much of a
specific virtue in this malady as "Mercury"
and "Iodide of Potassium" do in Syphilis.
I have seen "Chloral" used and with apparent
benefit, but should not rely on it as the main
treatment, and any one who has seen "Chloral"
Employed in this affection will agree with me
in saying that in its primary action it
produces increased excitation and more
marked cerebral symptoms, while its

Secondary action is similar to that of Alcohol
without its healthful Stimulation.
But this should not prevent its use, as our
Entire aim is to produce Sleep, and so relieve
our patients (but for the time) of annoying
Symptoms.
Bromide of Potassium exerts a happy
influence in this malady.
It seems to tranquilize the acute hyperaesthesia
and is especially indicated when the delirium
is of a boisterous character, but when given
alone is entirely inadequate to promote the cure.
The flagging powers of life should be
sustained by good nourishment.
Should Constipation persist some mild
laxative may be administered, but Mercurials
should be restricted for reasons already

mentioned

Local Treatment

I think that much can be done to alleviate the sufferings of humanity by local applications. And I have seen a marked amelioration of grave symptoms result from their use.

Nothing answers our purpose so well (and an agent which is always at hand) as Ice, this finely crushed and introduced in a bladder and applied freely to the head and also to the spine does much to relieve pain, it seems to act by annuling sensation.

The Empf Epispastici 3×4 applied to the nape of the neck acts judiciously and I have seen much good result from its use.

AN

Inaugural Dissertation

ON

Hydrocele

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Isaac S. Stone

Of

Sandy Spring Md.

Session of 1871 And 1872

Thesis.

The subject of Thesis writing has been treated of so often by Thesis writers as to leave but little to say on the subject. Therefore I shall make no delay in commencing the subject I have selected.
It is sufficient to know that it is impossible to make this attempt at all approach perfection.

Hydrocele

Hydrocele is not an uncommon affection since it has been observed that so many cases have presented

Chancellors for treatment in the University hospital during the past year. It is a disease occuring in private as well as in hospital practice. The medical man of the country must know its history & treatment as well as any one in the larger cities. where exists the fountain head of medical knowledge.

The history is short and easily given. Like all affections it has been known for a long time & has been subjected to various modes of treatment. It is classed among the dropsies and is a collection of water in the Tunica Vaginalis.

It may commence without - any premonition and the sac may be filled without much discomfort on the part of the patient. There is no way of telling when it is about commencing and it is of no advantage to know as there is no prevention known. unless some mechanical or other cause can be removed. When its cause is inflammation resulting from some operation in the vicinity this may be a method by which we can predict it. But this of its self is of little value. as no good can come of it. When it comes from inflammation

of course it is well known as the usual signs are quite sufficient to attract attention to the part. After the sac becomes distended with fluid there is of course some inconvenience from the size of the tumor, even though there is no pain existing there. Not unfrequently however there is much pain caused by the weight of the tumor, and this causes the patient to seek the advice of the surgeon. The scrotum becomes of its true shape an ovoid sphere. The tumor is of various sizes at times reaching the size of a Coca nut or larger. Various forms present

themselves, sometimes with a visible constriction about the central portion. Every form may present- owing to different- causes. The tumor contains more or less fluid from an ounce to a pint- and a half. The fluid partakes of the character of the fluid in ascites. It- mostly contains Albumen and is alike in color and consistency. At times a small amount of blood is found mixed with the fluid of course changing its color, to red or dark brown. The inexperienced surgeon is often surprised to find such a thing. but it does nothing more

than astonish him as no harm comes of it. This disease occurs at any age, but most commonly is found in the middle aged. It is found in children under certain circumstances. It may also be congenital.

There are three kinds of Hydrocele considered Anatomically, but the treatment does not vary as much as might at first be supposed. Each kind has of necessity a sac with fluid contents, which must be evacuated and this is essential to treatment. The most frequent form is when the sac of the Tunica Vaginalis becomes

the seat of the effusion. The next in order of frequency is the encysted variety in which the testis, or cord is distended by the fluid. The encysted variety is not unfrequently met with and is known to require about the same treatment. The fluid is contained in a cyst which projects from the testis pushing the serous investment before it.

Causation.

Many things might be mentioned as exciting and predisposing causes but all amount to the same or nearly the same thing. Hydrocele usually comes on gradually without any reason

then the question arises to the patient as well as surgeon, why does it come? Thus like many other things becomes very perplexing if we think much of it. In general the question is answered by asking if there is a cause for everything, easily seen and understood. A fruitful cause is where the scrotum has been struck forcibly, or its contents injured. Any instrument penetrating through the walls of the scrotum could cause Hydrocele. All of these cause inflammation which at last is the cause of the Hydrocele.

Epididymitis is a known cause. In this the already existing inflammation

spreads to the adjacent tissues and thus causes a Hydrocele. The same may be said of Orchitis which is more rare. Tubreculous disease could cause irritation sufficient to produce effusion. The rough tubrcles coming in contact with the membrane and rubbing against it. Syphilis would act in a similar manner. A case illustrative of this was in the hospital recently. The man had either Syphilitic or Cancroid disease of testicle to the touch, distinct nodules could be felt on the tunica albuginea. To test the diagnosis the Iodide of Potassium was given which brought

about amelioration of symptoms quite speedily. The testicle which was much enlarged gradually grew smaller until there was little discomfort. The patient was discharged seemingly cured.
But he was not cured, as was shown by the fact of his coming again to the hospital in search of advice. This time he presented a small Hydrocele which was opened by the surgeon in charge. A knife being the instrument used. The slight operation was not followed by cure. Much inflammation resulted followed by edema of scrotum. The operation possibly would have been followed by good results had not the

cause still existed. which was the case.
The man did not improve until the
testicle was removed when he showed
marked improvement immediately.
This proves that a form of irritation
was the cause and unless the cause is
removed a cure can never take place.
Still another cause is worthy of mention
and this is varicocele. I know of but one
case in my experience where such was
the case but this case was evidently
conclusive. In varicocele the scrotum
becomes long and pendulous, rendering
the skin thin thus affording little
protection to parts within. It is thus very
susceptible to injuries, and could easily

get hurt in various ways, quite sufficient to cause inflammation. The veins are distended with blood which does not circulate as rapidly as should be the case. The veins form knots which to the touch resemble a bag of worms as has been aptly compared to. These knots are liable in themselves to be hurt or to give rise to some irritation.

Another variety of Hydrocele occurs in practice. This is caused by an opening existing between the cavity of Peritoneum and that of tunica vaginalis. Any fluid in the cavity of Peritoneum would then gravitate to the most dependant part. Druitt mentions a case where the

abdominal cavity was drained of its fluid contents by opening a Hydrocele. This variety may be known by pressing the fluid back into the abdominal cavity. This can only serve as a means of diagnosis for the fluid soon comes down again.

Diagnosis.

Hydrocele is to be distinguished from a few affections which simulate it to a certain extent. Some of these are of much importance. one can readily see how great a mistake could be made when the diseases which resemble it present themselves. The life of the patient and reputation of the surgeon are at stake. Suppose a young surgeon should cut into

an inguinal hernia by mistake what would the consequence be? on one hand the life of the patient in great danger and on the other the loss of a growing reputation which he has so long desired to gain. Such a mistake would indeed be apt to shake the courage of the veteran with the knife. The greatest precaution is to be used against hernia. This is generally done with no trouble if the usual methods are used to establish diagnosis. The cough as a rule is often quite sufficient to make it certain. The fluid is known by its translucency, fluctuation and by the manner in which the tumor is formed.

Difficulties frequently arise however, and the tact of the surgeon is often put to the extreme to be absolutely certain. When the scrotum is large and thick, at times adematous or filled with an intra epiplocele, the diagnosis is not so easy. But here the cough would come in as valuable aid, this of course is wanting in Hydrocele. In hernia the base of tumor is toward the body and there is a large pedicle connecting the tumor with abdomen. The most important characteristic of Hydrocele in part of diagnosis is the fact of it being translucent. This at once throws aside any opaque tumor being Hydrocele. A candle

lighted and held so as to let the rays come through the tumor to the eye at once shows its amount of transparency. Still this like many other points is not always proof positive. For there could be a tumor of testicle with some fluid around it which would give all the characteristics of this test. The symptom mostly relied on when it can be used is fluctuation. This cannot always be used for positive diagnosis as the scrotum may be stretched so very tight as to almost of necessity exclude this sign. This is also deceptive in rare cases as the following case shows. There was a case in the hospital with what was supposed to be a hydrocele either

side. The important sign fluctuation was undoubtedly there the luminosity existed and many things seemed to show that Hydrocele existed. The trocar was pushed in and no water made its appearance only a few drops of blood issued forth. A slight incision was made only to reveal the true disease Encephaloid of testis. The testicle was removed by continuing the line of section. The mistake in this case was of little moment as it did not shorten the mans life. The mistake was made owing to the fact that a small amount of fluid existed at the base of tumor which was by pressure spread over the whole surface of tumor. This with

the great vascularity of the mass gave rise to the fluctuation. The error in diagnosis certainly did some good to our minds at least to show us how we can be mistaken by things we dont think of.

From haematocele it may be distinguished by the opacity of blood in contradistinction to the fluid of Hydrocele. This is of little value as regards treatment which is just the same. Malignant disease should be excluded as some dangerous experiment might be tried. Malignant disease of the testicle may be known by a hard knotty feel to the fingers on examination. Lipoma, Sarcocele and other diseases are known readily and may be excluded by

attention to points of diagnosis already given. This sums up the diagnosis of this disease and all the rest must be left to the surgeon

Prognosis

The prognosis is as a rule favorable unless some complication exists or arises. With proper treatment it is soon remedied and just the opposite when bad treatment is instituted. More or less harm frequently arises by setting up too much inflammation by the use of cuts or injections too irritating to suit the case. In old and worn out subjects the results are not always so favorable.

Treatment

This is the most important part of all for a person need not know all the history of the disease and still treat it successfully. It is with this disease like many others, it has been subjected to various methods of treatment according to the preference of the surgeon. Like other diseases Hydrocele can be treated in various ways and must have good as well as bad methods. In order to treat a case we must take away the fluid and cause obliteration of the cavity or so change the condition of this membrane as to prevent the formation of the fluid.

To get such results several methods may be tried. But there is certainly one method best adapted, and this will yet be seen. The operation most frequently resorted to, is the simple puncture and thus drawing away the fluid. This is done by means of trocar and canula. However the fluid soon collects again and the patient again seeks relief chiefly palliative in character which they seem to enjoy as frequently they will not consent to radical cure. This simple operation cannot be dispensed with as it is intended to suit many who they know

this can never hurt them, while any other method possibly would give them trouble. When this operation is performed a suspensory bandage should be worn as it may give much comfort. Few other palliative procedures are adopted, unless some evaporating lotion is ordered to suit the mind of the patient. Some precaution is necessary in introducing the trocar, as the testicle lies behind where the instrument is usually inserted. This is quite easy if the anatomical relations are kept in mind. There may be difficulty in getting into the sac. We are told that the

point of the instrument may go around the rectum much to the astonishment of the surgeon. This I have never seen happen as precautions are taken against such an accident in the hospital. Some adopt the plan of fixing the scrotum and tunica vaginalis by transfixing with a tenaculum. Then there can be no possibility of making the mistake mentioned. The instrument is passed through the wall of the tumor then turned upward and pushed in as far as desired.

The method mostly adopted for the radical cure is that of taking away the fluid and injecting some

irritating fluid. For this purpose the tincture of Iodine is generally used. Many other things may be used however and in fact anything may cause enough irritation. Brandy, wine, alcohol the Liq Iodini Compositus and many other agents have been tried with success. The simple tincture has all the desired effects to be obtained by the others and is therefor used. While the canula remains inserted inject about an ounce of the tincture, allowing it to come in contact with all parts of the sac. It may remain for one or two minutes then evacuating it, and withdrawing the canula. The pain following

this procedure is frequently severe requiring the use of an anodyne. This operation may fail in curing the disease. When such is the case some more irritating injection must be used. Another method of cure consists in the use of the tent or seton. This is upheld by some as the only certain method of cure. One thing is very certain and that is enough inflammation may arise to cause trouble. The greatest danger is in starting so much inflammation and we must try to prevent rather than insure that same by the use of such means best suited to effect such a purpose.

We had the good fortune on one occasion of watching the progress of such treatment. The man had a Hydrocele which presented the usual signs and was operated on in the old way. by cutting in the tumor with a knife and placing a piece of lint in the wound. The lint was removed after 24 hours. when quite enough inflammation was elicited to result in an Epididymitis on that side with loss of function of testicle.

A great disadvantage is the liability to leave the lint in the wound too long. It is worthy of remark that while some persons indeed are just the contrary and in the latter case the lint may be

used with caution. The same remarks will suffice for the ecbolin, which consists of a double thread of some sort sent through the scrotum. We have seen the results of such treatment - and could easily understand how a much better operation may be devised. The plan I now speak of was first suggested by our Colonel Prof. of Operative Surgery. The facts of a case are worth all theories this holds good almost universally. But when we see methods of treatment, indeed very harsh methods, result very unsatisfactorily, we are led to consider a safe and a milder means of attaining the same end. The operation will suit

all cases without any exception where any other method could be adopted. It is very simple thing thus described. A hypodermic syringe is inserted in the tumor. This combines several advantages. The point is needle shaped and causes little irritation. It also confirms the diagnosis. By allowing some of the fluid to escape, which may be examined in any way. If the disease is found to be of such a character as to preclude operation, the wound of this small instrument can do no harm.

There are good reasons why this method should supersede all others The sac may be emptied of its contents through this small tube and any fluid

may be injected through it. This is all done with absence of pain and does not cause much inflammation. Should the operation fail at first, there is no reason why it could not be again tried, as the pain is trivial. The result of such treatment is not to all by actual observation in the hospital. But should an opportunity ever present its self to some of us, it will be tried beyond a doubt. For we would be substituting a sure safe and speedy remedy for others of an opposite character. Surgical operations change with time. But it is to be hoped that in the progress of medical and surgical science and

art toward perfection that operation for the radical cure of Hydrocele may be brought down to the utmost simplicity in the shape of the last mentioned operation. All admit that the best method of surgical procedure is the simplest. Then why not render all things simple plain and easy. Let us begin in small things to be perfect and then on a sure foundation begin battling against the walls of science and art, with the firm resolution of making the practice of medicine and surgery plain to all.

Scarlet Fever.

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J. H. Clawson S. C.
Febry. 14th, 1872.

Scarlet Fever.

Scarlet fever, scarlet rash, and scarlatina are identical, and are employed to designate one of the most frequent and fatal of the Zymotic diseases. This affection is most common in childhood, but may occur at any age. It is an exanthematous fever, always attended with more or less pharyngitis. It is said to cause more deaths in the city of New York, than any other contagious affection.

There is no disease which presents so great a variety of symptoms, and so many different characters; this has led to a multiplicity of names, based on the symptoms and intensity of the disease, all of which are identical.

I follow Smith, who followed Bouchut, dividing the disease into three varieties:- regular, irregular and malignant.

Symptoms of regular form. Scarlet fever usually begins abruptly, it is often possible to tell the exact time of its commencement. Usually ushered in by chilliness, or by a distinct chill, intense fever arises, accompanied by cephalalgia, anorexia and thirst, sometimes delirium. Pulse rises to 120, 130 and 150 per minute, skin hot, face flushed, eyes bright, and more or less suffused. Vomiting is an early symptom especially in children, commonly appearing before the rash, but not always. According to Smith vomiting is due to the effect of the virus on the brain.

Persistent vomiting indicates a serious form of the disease. Epistaxis occasionally occurs. Bowels regular, or somewhat constipated; slight diarrhoea sometimes occurs. Redness of the fauces with or without soreness on swallowing, papillae of tongue elevated. Pharyngitis has already commenced with a degree of stomatitis an tonsillitis. This state continues through the disease,. The tongue is moist and covered with a slight fur.

When the above symptoms have continued from one to two days, the rash appears. First behind the ears, on the neck face, and shoulders in reddish patches. The patches rapidly coalesce but are not uniform as in erysipelas, but are seen to be studded with minute points

of a distinct rise. The eruption extends over the whole cutaneous surface in twenty four hours. No distinct prominences appear, but on passing the finger over the surface a sense of roughness is imparted from engorgement of the papillae. The rash disappears on pressure, or upon drawing a hard-pointed substance over the surface. Slow return of rash marks a malignant form of the disease. Rash not uniform over the surface, sometimes absent in places. The integument slightly swollen, and eruption sometimes accompanied by itching. The rash attains its maximum of intensity and diffusion on the third day after its appearance.

Temperature in first days, ordinarily from 102° to 105°, sometimes as high as 107° F. Perspiration during this period usually checked, so that the skin is hot and dry. Respiration slightly accelerated, often slight cough from mucus in the throat or bronchial tubes. Bronchitis either absent, or slight. The urine is high colored, and during first days frequently deposits urates on cooling.

These symptoms continue from 4 to 6 days, when the fever begins to abate, the heat becomes less, the rash fainter, and there is a gradual decline of the disease. In mild and even pretty severe cases the disease pursues a regular and favorable course, convalescence beginning by the end of the first or beginning

of the second week. In the second week the rash becomes less and less distinct, and finally disappears. The other symptoms disappearing, the eye becomes bright, and the countenance natural.

The period of desquamation succeeds. Exfoliation of the epidermis occurs over the whole of body. When the skin is thin the detached epidermis presents a furfuraceous appearance; on palms of hands, and soles of feet comes off in thick layers.

Scarlet fever is sometimes so mild as to be recognised only by sequelae. It is noticed that often when the disease is mildest the sequelae are most fatal.

There is usually considerable faucial inflammation, even when the affection pursues a regular and favorable course. If the pharyngitis is intense and protracted, many writers designate the disease scarlatina anginosa. There is in these cases severe inflammation of the mucus membrane of the fauces, with swelling of the tonsils, and submucus infiltration, also more or less tumefaction around the angle of the jaw. These local affections render the pain greater, and the fever more protracted. These swellings often continue 10 or 12 weeks after the rash when they disappear by suppuration or resolution

Irregular form. The irregular form of Scarlet fever is commonly due to some disturbing cause. This cause is often

some previous existing disease, or at least disordered state of system. If scarlet fever occur during an attack of enteric-cholera there is frequently no eruption. In those who are much reduced by a previous disease, or have a disease which produces a flow of blood towards an internal organ, the rash is slow in appearing, indistinct or wholly absent. The fevers, and fevers with inflammation most frequently render scarlet fever irregular. Some affections occuring in connection with scarlet fever do not change its symptoms, but are themselves modified. Scarlet fever occuring with pertussis, does not undergo any material change, but the cough is modified during

the coexistence of the two. Scarlet fever may be irregular in those who are robust, free from any other disease, and without any appreciable cause. Scarlet fever occurring the second time often has the rash irregular and incomplete. It sometimes presents all the features of the regular disease, and pursues its regular course; but is more apt to be irregular than in the first attack.

Malignant form. In some epidemics this form is frequent, in others rare. Generally commences with severe symptoms, nervous symptoms predominating, such as head-ache and delirium. Many pass into coma and die within two or three days, evidently succumbing to the violence of

the septicemic poison, while the disease is in its commencement. The rash in this form is more dusky, it disappears on pressure, and returns slowly when the pressure is removed. This arises from extreme sluggishness of the capillary system. Great restlessness in some, moving about from one position to another half unconsciously. They seldom speak at all, or they mutter like those affected with the graver forms of typhoid fever talking of things which interested them when well. There is great elevation of temperature, except when the case approaches a fatal termination, pulse very rapid, from 130 to 160. Sometimes great heat of head and body, while the extremities are cold.

This is an unfavorable sign. Dangerous nervous symptoms, as convulsion and coma occur chiefly within the first three or four days; if these subside the danger is mainly from exhaustion. Those who survive the outset of the disease, often have severe pharyngitis, with inflammation of the lymphatic glands, and cellular tissue round the angle of the jaw. The chief danger in pharyngitis is from exhaustion, it sometimes rendering deglutition difficult, seriously interfering with nutrition

Complications. Complications may occur in any form, but are more frequent in malignant cases. The most common and serious, as regards the nervous system, are clonic convulsions

Those occuring at the commencement are not generally serious. Convulsions occuring after the development of the rash, are an almost certain precursor of death. Convulsions are due probably, in part, to the congestion of the nervous centres. Congestion often causes convulsions, and the latter increase the former. But the most important element in the causation of the convulsions is the presence of the scarlatinous poison in the blood. Convulsions occuring at the commencement of the disease are generally single, occuring often they become serious.

The anginose affection is at times more severe than the primary disease itself, requiring the chief treatment.

A pseudo-membrane sometimes forms upon the faucial surface, especially over the tonsils, but it is soft, and in isolated patches, and easily detached. In dyspthentic complication the pseudo-membrane is more firm and extensive, as in primary dyspthria. Gangrene of the subcutaneous cellular tissue of the neck, occasionally results from pharyngitis in scarlet fever. This sometimes suppurates, which indicates an intense grade of inflammation or a low vitality, but many recover. Scarlet fever is also complicated with Diarrhoea and entero-colitis. A frequent complication is articular Rheumatism, this supervenes when the fever begins to decline, the common seat is the areolar tissue of the wrist.

This complication is not generally
serious. The urates are not so generally
present in the urine, as in acute rheu-
matism.

Serous inflammation affecting the
peritoneum, pleura, or pericardium is
a common complication. It occurs
during the desquamative period, many
such cases are fatal. Pericarditis
may be with difficulty diagnosticated
if slight, and attended by moderate ef-
fusion. Pleuritis occuring in Scarlet fe-
ver may be suppurative.

Any of the above complications may
occur as sequelae, but there is a
disease which is not often a complica-
tion, but a common and serious se-
quel, namely: - nephritis with al-
buminuria.

Otorrhoea. Inflammation of the external ear, giving rise to otorrhoea, is a frequent sequel. Some cases of internal otitis occur.

Anatomical character. In many the brain, and lungs are congested, the Peyerian, solitary, and mesenteric glands are enlarged, and the spleen enlarged and softened.

Nature. Scarlet fever is a zymotic affection, it is highly infectious, also inoculable. This disease can be communicated by the clothes of a third party; only, infections 2 or 3 yards. The scarlatinous poison may remain for months in an apartment, or in clothing without diminution of its affectiveness. The period of incubation varies, usually from 3 to 8 days.

It occurs most frequently between the age of three and ten years. Most adults possess immunity from the disease; parturient women, however, are liable to it. Scarlet fever sometimes sporadic, generally epidemic; some epidemics mild, others malignant.

Diagnosis. We can make no positive diagnosis prior to the eruption. Are led to expect its existence after exposure, when the child is suddenly seized with intense fever, pulse rising from 110 to 120 or more, and Temperature to 102°, 104°, and 106° F., this is rendered more positive by vomiting, and a blush or redness upon the fauces. Is easily distinguished from roseola, has been mistaken for it. It has often been mistaken for measles. The coryza, bronchitis, and absence, or

slight degree of pharyngitis, in connection with other symptoms enable us to distinguish between the two.

Prognosis. The prognosis depends on the form of the disease, strength of patient, and presence or absence of complications. No patient entirely safe until after two or three weeks, even more, after disappearance of the rash.

Treatment. Scarlet fever when mild, and without complication requires little treatment. If there be tendency to constipation give gentle cathartic as citrate of magnesia, with a diaphoretic mixture in addition. The following from "Smith on Diseases of Children" is highly recommended.

℞ Spts Aether Nitr.,

Syr. Ipecac āā ʒii

Syr Simplic ℥i

M Dose Teaspoonful every three hours to child 3 to 5 years old.

If patient be restless with considerable fever, an occasional mustard foot-bath, with cooling lotions to the head, will be beneficial

Trousseau recommends cold affusions as an important part of the treatment, to be employed in the first part of sthenic cases, and especially when nervous syptoms predominate. Trousseau believes that cold affusions diminish the fever, and calms the nervous excitement; says he has never used them without benefit. It is urged that cold affusions when used upon

the very young do more harm-
than good from the fright and shock
occasioned by them. Smith recom-
mends sponging freely with tepid water
and vinegar.

Carbonate of Ammonia is one of the
best remedies, administered with a
tonic. May be prescribed at first
visit, and continued at regular inter-
vals:-

℞ Carb. Ammon.
Ferri et ammon citrat āā ʒss
Syr. Simplic ℥ ii

M. Dose. Teaspoonful every 3 hours
to child of five (5) years.

The unpleasant itching which great-
ly increases the restlessness of the pa-
tient is best remedied by inunc-
tion

It alleves the dryness, and, in a measure, the heat of surface. Dr. J. F. Meigs recommends the following:—

℞ Glycerinae ʒ i
Ung. aq. rosae ℥ i

M. Rub parts with palm of hand, or with muslin or linen.

In ataxic conditions when rash is indistinct employ general mustard baths. This quickens the capillary circulation, calms the nervous excitement, and brings out the rash, thereby preventing convulsions.

In pharyngitis Smith recommends a thin slice of pork extending from ear to ear, this sprinkled with salt and pulverized camphor.

Chlorate of potash in combination with iron chloride Iron has been highly recommended as an internal remedy in the anginose form.

The diet in convalescence should be nutritious, consisting of animal broths, milk porridge and the like, this given night as well as day.

In some cases alcoholic stimulants are called for. Wine whey or milk punch should be given regularly throughout the disease

The apartments of the patient should be airy and well ventillated, without exposure to currents of air.

Temperature should be uniform ranging from 68° to 70° F. Should be slightly elevated after fever has aborted and desquamation commenced.

Patient is very liable to be affected by changes of Temperature, and currents of air, hence great care should be exercised in the hygienic management of the patient during convalescence. If weather be at all inclement, he should not be permitted to leave the house for a month or six weeks.

Belladonna as a prophylactic agent has elicited much attention of late years. Some claim by its use that you can enjoy almost complete immunity from Scarlatina. Others endeavor to prove that it is entirely useless as a prophylactic agent. Whether or not it has any efficacy is still undecided.

But as it will do no harm in small doses, and may possibly do some good, it is best always to employ it.

The following formula from Hufeland:-

℞ Ext. Bellad. gr iii
Alcohol ℥ i
Aq. distillat ℥ ss

M Dose. (1) One drop morning and night for each year of child's age.

J. H. Clawson.
S. C.

I have referred to "Smith on Diseases of Children", and "Flints "Practice of Medicine"

AN

Inaugural Dissertation

ON

Croup.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

John Collinson

Of

A. A. County. Maryland.

Session of 1872.

Croup

Croup is one of the many diseases to which the respiratory apparatus is subject, it is entirely or almost peculiar to children, it is a Laryngo Tracheatis, designated by scientific writers as a Cynanche Trachealis or Cynanche Laryngea, The formidable nature of Symtoms attending it, its deleterious character, & unfavorable result, to which it so rapidly tends, have prompted, many of the ablest men of the profession, to devote much time and attention to the investigation of this disease, the result of these investigations have been crowned with success, reflecting much credit upon the profession. restoring many sufferers to health & have brought solace to grieved parents.

Croup as regarded by most pathologist, is divided into two distinct forms Spasmodic catarrhal or false croup, in contradistinction to pseudomembranous or true croup

Spasmodic or Catarrhal Croup.

The consideration of which, I will take up, it is by far, most common & less dangerous form of this disease.

Causes, exposure, especially when the weather is cold & damp. There seems to be an hereditary liability to this disease, most common from two to seven years old & it seldom if ever occurs after this age. Symptoms, In majority of cases, Catarrhal croup attacks suddenly at night, not unfrequently the child is affected for some time, with Symptoms of common

catarrah, such as coryza, sore throat,
bronchial irritation, cough of an ordinary
character & perhaps fever, before those
peculiar to croup are developed,
sometime Symptoms of this disease
present themselves & we may have
croupy cough, some hoarseness, & this though
always suspicious may subside or abate
without the disease being fully developed,
generally however these symptoms persist,
& are followed by others of a graver char-
acter, the child suddenly wakes up in
the night, with a loud ringing &
sonorous cough, during the intensity of the
paroxysm, voice hoarse or nearly extinguish
momentarily, but never entirely so, during
the intervals of each attack voice is nearly
natural, respiration difficult, face

flushed, skin hot, pulse accelerated, & little patient seems at times as if it would suffocate. & if paroxysm last long, the face becomes pale & livid, more or less congestion, & inflamation of tonsils, larynx, & pharynx, it occurs generally periodically, that is it occur in the afternoon, it is apt to recur again on following afternoon in cases of moderate severity the symptoms pass off in 24 to 48 hrs, but in the more severe, may last three five or seven days & if Pneumonia supervene, may last even longer, when catarrhal croup hangs on, you must suspect, Pneumonia or Bronchitis, hence always examine the lungs, in protracted cases.

Anatomical Character. The opportunities which present themselves for determining

the anitomical character of catarrhal croup are of such rare occurrence, that Dr. Lewis D. Smith, in his work on disease of children, says, I have seen but one post mortem examination, at autopsy he found uniform & intense injection throughout the whole extent of larynx & trachea extending into bronchial tubes, there was no fibrin or inflamed surface & but little mucus & pus. Diagnosis. There is a disease called Laryngismus Stridulus, which must not be confounded with this disease it differs by absence of catarrhal & inflamatory symtoms, in Laryngismus Stridulus, there is distortion of the face Spasmodic contraction, tonic convulsion of muscles of the hand & feet, then attacks occur at any time of day or night,

absence of cough, hoarseness, & its being of chronic duration, but the disease, for which it is most liable to be confounded is true, or Membranous croup, in true croup symptoms at first are slight, gradually increasing in severity, voice becomes more harsh, breathing more difficult, until at last, voice cannot be raised above a whisper & often entirely suppressed cough sounds as if it were muffled, some wheezing in inspiration can be detected, this disease creeps on slowly stealthily & unrelentingly, voice never clear, while false croup, though proceeded by symptoms of coryza, begins abruptly, attacks generally come on suddenly at night & cough is of spasmodic character loud & sonorous of a ringing character, while

true is harsh, rough & sounds as if it were muffled, but only pathognomonic symptom is expectoration of false membranes.
Prognosis. In simple case of Spasmodic favorable, but when complicated with Bronchitis & Pneumonia, it is far more unfavorable, & consequently, one should be very cautious, in rendering prognosis in croup. Treatment. In Spasmodic laryngitis, there are two objects to be kept in view; first, relief of present paroxysm, & secondly, warding off, or prevention of a second, To relieve the present paroxysm, put Ipecac ℈j in aqua ℥j sweetened & give teaspoonful every x or xv minutes or syr Ipecac in doses of teaspooful repeated in xv to xx minutes to child three years old & under

if this does not afford relief. for the promotion of the action of Ipecac. & relaxation of the Spasm. child may be placed in a pediluvium at temperature 94°. immerse it gradually up to its knees, if paroxysmal attack be violent & obstinate, patient may be immersed up to the chin in warm bath, not exceeding a temperature of 102°. keeping it in X or XV minutes. then patient taken from bath tub, should be wiped dry & placed in a bed, & may then be given a opiate such as Paregoric or Dovers Pow. even if these means prove inadequate, as they will sometimes undoubtedly do. you may then give a teaspoonful of finely pow. Alum in a little Syr every X or XV minutes which is a splendid safe & prompt emetic

a favorite remedy with Dr. John Buck-
ler of Baltimore is: Tarter Emetic gr j ipecac
℥ij Syr Squills ℥ij teaspoonful pro
re nata. In healthy robust children
over four years of age, having full
& rapid pulse, flushed face & other
evidences of active febrile movements,
& breathing so much arrested as to pro-
duce venous stasis, you may then
with propriety draw from ℥ii to iv of
blood, but this active treatment is
seldomed required in cases of Spasmod-
ic Laryngitis, in obstinate cases defying
the above treatment, mark you, in
strong, robust, & sthenic cases, not
those an anaemic, you may give small
doses of Tarter Emetic, but however if
in doubt, as regards strength of patient

constitution you had better resort to Calomel

Pseudo-membranous Laryngitis
or true Croup.

This is a purely local affection & about two-thirds of the cases confined to Larynx & Trachea & the remaining third extends to Bronchial tubes & sometimes to Pharynx. Causes. The causes which produce Spasmodic croup will also bring about this disease, so will also inhalation of acrid vapors, swallowing corrosive liquids, vicissitudes of temperature, imbibition of hot liquids. The secondary form of this disease also follows Measels & is an occasional sequela of Scarlet fever.

Anatomical Characters.

The lesions found after death, are first pseudo-membrane or false membrane upon surface of the Larynx, the amount of it varies in different instances, it may be in small patches, or may extend whole length of the larynx & trachea, which is formed by a fibrinous exudation, lying upon the surface of the mucous membrane, this membrane is sometimes ejected by efforts of the patient, but in majority of cases it is rapidly regenerated.

Symptoms.

The voice is sometimes changed from the onset, but generally comes on slowly, stealthily, & unexpectedly concealed under a slight hoarseness, the patients are

not aware of the seriousness of the disease until an alarm is given by the peculiar ringing cough, which becoming less & less frequent until it is finally almost smothered, respiration hurried & stridulous, voice hoarse & whispering, there is excessive dyspnoea, the plastic exudation fills up the rima glottidis, head is thrown back, & its arms in constant motion, frequently grasping its throat, expansion of the eyes, rapid acceleration of the pulse, gurgling sound of the throat & hot skin, are heralds of a fatal termination, anorexia thirst & vomiting, irrespective of emetics, the two former are found in many instances, but later rare in most cases, there is a false membrane on larynx

which varies in thickness & is of a whitish yellow color, Croup cough is rare in early infancy but most frequent from years of two to seven, occurs more frequency in males than females, & is most common in the fall months Pneumonia & Bronchitis are among the most frequent complications & it also follows Measles & Scarlet fever, Fatal cases may terminate in three of four days, but ordinary duration is from five to fourteen days,

Diagnosis

The principal disease with which it is most likely to be confounded is Spasmodic Laryngitis, from which however the diagnosis is ordinarly easy, & with care & close attention can be

accurately made, In false croup, first we have coryza & hoarseness generally begins suddenly in the night & after the convulsions, child appears well whereas in true croup the fever continues & voice remains hoarse & smothered & symptoms continue to grow worse, in true croup, there is a pseudo-membrane upon fauces & surrounding parts, in fits of true croup, small particles of fibrinous matter are expectorated. There are some points worthy of notice in differential diagnosis, between this disease & Diphtheritic croup, first history of the case, second swelling of cervical glands, so common in Diphtheria & never happening in true croup; if so, exceedingly slight. third

first is local & second is a general
disease, fourth in true croup, there is
no fetor of breath, which is a marked
symptom of Dyphtheritic croup. the last
prevails when Diphtheria, & extends down-
wards, while true croup commences in
windpipe & extends upwards

Prognosis.

True croup is exceedingly dangerous,
the inflamation has generally made
much advancement before physician
is called, when complicated with Pneu-
monia it adds fearfully to its danger
Bronchitis also when present, renders
prognosis more unfavorable, generally
the younger the child & more feeble its
constitution the more dangerous the disease
is. Do not make your prognosis too

hurriedly, but let your patient be convalescent for at least 24 hours before giving a favorable prognosis, as a change sometimes takes place suddenly producing death in 12 hours, when false membrane is expectorated, cough looses a diminution of dyspnoea, prognosis is more favorable, but on other hand when dyspnoea increases, voice & cough becoming more hoarse, excessive pallor of the face & cold perspiration the prognosis is very unfavorable.

Treatment.

If called early, the first idea which suggest itself is if possible to prevent formation of Pseudo-membrane, it is doubtful with many able authorities as to whether this can be done or no

Bloodletting in the main is believed to be injudicious treatment, but however if it is employed let it be in early stage of the disease. Mercury is admissable & objections not to be noticed so long as you think there is benefit to be derived from it, but you must limit its use to children of a moderate constitution. A good purgative in the beginning sometimes proves beneficial, which may be followed by a dose of Dovers Pow. Emetics are universally recommended, Antimony is far too depressing an agent. Of emetics, Alum believed to be the best, you may give. Ipecac grs x & a teaspoonful of finely pow. Alum. together. Turpeth mineral or Yellow Sulphuret of

Mercury, most certain emetic of all, & will act when all others fail, Dose from grs ij to iij. every xv minutes to a child two to three years old, or until it acts, or you may give from grs ij to j of Sulphate of Copper, every xv minutes to a child two to three years old, until it produces emesis. Inhalation of lime water proves beneficial at times, diffusion of hot steam at temperature of 85 to 90° through the room, Inhalation of Bromide of Potash grs x to ℥j of water are useful agents. Acid Carbolic ℥j aqua ℥vj. misce, inhaled is beneficial, in protracted dyspnoea & croupal cough, give following agent. Potas. Chlorat ℥j. Amon. Muriat. ʒij. Syr Simplic ℥j. Aqua ℥ij. Misce. One

teaspoonful every 20 minutes to half an hour, or in cases not severe every two hours Inhalation of Sulphuric Ether vapor useful in some instances, you may use locally Argentis Nitras ℈j to ℥v aqua, or Zinc Chlor Ferri, It is very important that the child's strength be not too much reduced, but should be kept up by appropriate agents, such as good old french brandy, after these appropiate remedies have proved inefficient, & dyspnoea is distressing, commencing lividity, & suffocation seems unavoidable, do not wait for forerunners of death to present themselves, such as cold extremities & livid countenance, & clammy sweats, but resort to the

operation of Tracheotomy immediately

AN

Inaugural Dissertation

ON

Yellow Fever.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Louis B. Faith

Of

St Augustine Flor.

Session of 1871-72

consideration. It is also sometimes called, Bulam F[illegible], Mal de Siam, Coup de Barre etc etc &c. The term Yellow Fever is not strictly a [illegible]

yellowness of the skin is observed at all, or at least not until after death; but the symptoms of the disease are so variable, no particular or pathognomonic symptoms [illegible]

I do not propose to change the name [illegible]

very extensive history of the origin of Yellow Fever. There has been amon

[illegible]

[illegible]

[illegible]

[illegible]

the description of the disease given
others in the Barbadoes, to have
[illegible]
[illegible]
Dutertre was the first who described it
[illegible] this continent, & he first saw it
in the Barbadoes Islands as early as
[illegible]
pest unknown previously in these
Islands." From the very severe mus-
cular pains with which it was attended
as if from heavy blows he called
the disease "Coup de Barre".

[illegible]

[illegible]

[illegible]

[illegible] as at Boston in 1693, at Philadel-
-phia in 1695, at Charleston in 1695,
at New York in 1702, & in Virginia

[illegible]

communicable when the influence

the solid elements are broken down

mucous membrane, which contains

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

may be stated as a rule. That the

[illegible]

[illegible]

to the skin, down to the negro, who

is generally out little, if at all suscep-

[illegible]

[illegible]

[illegible]

from its influence. During the epidem-

-ic of 1820 in Savannah, of Seven hundred

[illegible]

[illegible]

are numerous & changeable, in no degree
catering a wider scope. It is often
by a distinct & formal access
the precise period of its commencement
can be stated with [illegible] precision

[illegible]

[illegible]

distinguished professi[illegible]

[illegible]

[illegible] ...ently meet

[illegible] on the street with this desiran[illegible]

[illegible]

[illegible] to bed, & in a few [illegible]

[illegible] Dr. Rush said in [illegible]

[illegible] 1793

[illegible]

[illegible]

[illegible]

after a regular & natural sleep, & were

[illegible]

a sudden & unexpected attack of Yellow Fev-

er" When premonitory symptoms

[illegible]

[illegible]

[illegible]

[illegible]al "Malaise".

[illegible]

[illegible] present are, rigors, nausea

frontal, but especially supraorbital

headache, the conjunctivae injected,

& the eyes have a peculiar brilliant

appearance, aching of the just [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

usually but moderately increased.

[illegible]

[illegible]

gaseous, [illegible]

least pressure of the fing[illegible]

[illegible]

[illegible], is moist & [illegible]

[illegible]

white villous fur. The most [illegible]

ackeristic appearance of the tongue

[illegible]

[illegible]. There may be a remarkable

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

may often be made with-

stomach is a very consta-

remarkable, as well as, instan-

table of the symptoms.

There is often, indeed, a

[illegible]

[illegible], even in the [illegible]

[illegible] in the smaller quantities

[illegible] rejected, & the [illegible]

[illegible]

finds himself oblige to look on, with

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

just day or in a few hours after

the attack, but may occur at an

[illegible]

[illegible] vomited consists of the solids

& fluids that have been taken into

the stomach, mixed with the juices

& present a yellowish-green appearan

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

This latter, upon examina-
[illegible] will be found to contain bile.
[illegible]
fifth day, the patient will generally
escape it altogether. In cases which
[illegible]
is sometimes, added to the usual sy-
[illegible] peculiar acrid or burning
[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

suspended. The dejections from the

[illegible]

dark. The features shrink & a dis-

tressing degree of singultus takes

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] period. It is usually first

[illegible] in the line of the large

vessels of the [illegible]

& then over the whole body. The bow-

[illegible] invariable costive &

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] it has been observed to take place [illegible] even orifice of the [illegible] & even [illegible] the skin & under the nails.

As this stage proceeds, the [illegible] crusted that it has the appearance [illegible] being been seared with [illegible] Jactitation is also a remarkable [illegible] incessantly, unable to procure [illegible]

[illegible]

[illegible] draws deep inspirations, & sometimes

[illegible]

[illegible]

[illegible]

[illegible] v. The peculiar physiognomy [illegible]

[illegible] perhaps, as great an aid to

correct diagnosis as any one symptom

[illegible]

[illegible]

the first thing that strikes the eye of the

physician was the countenance, It was

so much unlike that which is exhibited

[illegible]

[illegible]

domestic animals. The eyes were [illegible]

[illegible]

[illegible]

[illegible]

[illegible] the face was suffused with [illegible]

[illegible]

[illegible] down cast & clouded."

Wm Lewis said "the physiognomy [illegible]

[illegible]

not [illegible]

[illegible]ocious expression of eyes & features

which [illegible]

[illegible] usually an attempt on the part of

the patient [illegible]

[illegible]

[illegible]

[illegible]

[illegible] the brow at ~~the~~ an early period, & once

enthroned, no effort on the part of the

patient can disturbe its reign, he ma

[illegible]

[illegible] particular [illegible] treatment [illegible]

[illegible] suit to every case, even in the same

[illegible] demic, & since the character of the

[illegible]

[illegible]

can of course adopt no fixed plan of

treatment. Each particular case must

be observed & treated pro re nata.

By the mercurial plan we

[illegible] mercury until its specific effect

is produced. This plan has numerous ad-

-ponents, as well as advocates. Some [illegible]

that mercury is never beneficial exc[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] fibrile excitement, with a feel & boundary [illegible]

[illegible]

it is now seldom resorted to. It is claimed by some to be particularly objectionable [illegible] disease, as a condition (collapse) is likely soon to follow in which all the [illegible] of the patient is needed. Cathartics may be used such as calomel & jalap. [illegible] promotes the secretions of the kidneys. [illegible] cold douche is very good & recommended by Dr. Dickson.

There has always been a certain [illegible] number of practitioners, who have pursued [illegible]

[illegible] treatment [illegible]
in some epidemics seems to be [illegible]
[illegible]. A variety of remedies may be
[illegible]
[illegible] the warm bath containing mustard
[illegible]
patient should be allowed ample nur-
[illegible]
[illegible]
If hemorrhage occur astringents should
[illegible] on general principles, but in
[illegible]
-age, all treatment fails & they generally
[illegible]inate fatally. Blisters are dan-
-gerous as hemorrhage may occur
[illegible] the blistered surface. Upon [illegible]
[illegible]tem examinations, the straw color

An Essay.

On

The Different Modes of Death

Respectfully Submitted

To the

Provost, Regents, and Faculty,

of Physic of the

University of Maryland,

For the Degree of

Doctor of Medicine

By

E. J. Murphy

of

Tennessee

Session of 1871-72

Different modes of death —

By the state which we denominate death may be understood that condition of organized bodies in which no vitality exists — Death in such, necessarily, implying that life has once existed — It is therefore a purely negative condition; Since upon the preexistence of life must depend that condition which the absence of life alone can define — And since life exists only

in organized bodies it is to such organizations that have been deprived of their vitality that we must look for the condition known as death— It has wisely entered into the plans of Providence that, without exception every organism should have but a temporary existence. And this applies equally to the infusoria of a day and the mammal of a century— to the fungus of a night. or the oak of a thousand years— even the highest order of the series being no exception to the general rule— And, though

all men must die, the most casual observer is aware that they do not all die in the same manner. Some are cut off in an instant – but one short struggle and life is extinct. While others linger more or less as if life were loath to leave its former Tenement. Nor is this event confined to any particular age, climate, or condition of life – The infant of an hour; the adult in full strength and the man of "three score years and ten" alike obey the universal law ———

The modes of death are many and have been variously

classified by different authors and observers. But by whatever means the end may have been attained, one thing of necessity must have come to pass. The blood must have ceased to make its usual rounds of circulation; and its gradual death will have become more or less altered in its character. Thus conditionally at least, substantiating an observation of no recent date. "That the blood of the animal is the life thereof"

Death may begin in any part of the body; but before the

complete transition has been made. the three vital organs, viz. the heart the brain and the lungs must have been invaded and overcome; since so long as either of these remains in functional activity, life to some extent remains — And when all three of these have been entirely and permanently overcome life is immediately extinguished. But so closely are these three organs linked together and so mutual is their dependence on each other. that neither can be long extinct without the others of necessity very soon become

Hence the question of life or death resolves itself into whether or not the blood has permanently ceased to circulate, and the different modes of death into how this circulation may be brought to a stand by the successive cessation of the forces that contribute to its motion.

Which of these essential organs first begins to fail and how it refuses to obey the vital compact? How the brain, in connection with the bloody and Ganglionic system of nerves may refuse to bestow the condition

of irritability and power of contraction upon the heart? Or gives them an unwonted fullness? Or how the lungs refuse to perform their normal functions? and why? are all questions of the first importance and worthy to be resolved——
Since death so frequently comes and by first involving the heart and afterwards the brain and lungs- let us see how its failure may be brought about——
It is generally accounted that this failure may be brought about in two very different ways and by different means- First the heart may cease to act

from the want of its accustomed stimulus within: the blood failing to arrive in sufficient quantity to stimulate it to its normal action. The organ therefore becoming quiescent. Such would be the case when profuse Hemorrhage had taken place - as from wounds - the bursting of aneurismal tumors. post partum Hemorrhage - or from any cause operating to reduce the quantity of blood, with great rapidity - to such an extent, that the cavities of the organ would fail to fill sufficiently to stimulate it to contraction - and thus put an end to the circulation of

the fluid remaining in the System
The occurrence of death by this
mode has been aptly termed
death by Anaemia— Signifying the
want or privation of blood—
Autopsies after this mode of death
Show the heart to be empty and
contracted to a limited extent and
further experiment have shown
that its power of contractility
remains, and after death has
apparently taken possession of
the entire body, provided the
requisite stimulus be applied—
The Symptoms of death
commencing in this way
are very marked and unmistakable

such as paleness of the countenance and lips- cold exudations from the skin- dimness, or even sometimes total, loss of vision- vertigo- widely dilated pupils- a pulse slow, weak and faltering with the superventions of insensibility. Attending these symptoms we frequently have- nausea and vomiting- with exceeding restlessness- and towards the close gasping and irregularity of respiration- delirium denoting the insufficient supply of blood to the brain- while incipient convulsions announce the near approach of dissolution-

The second mode of death also approaching by way of the heart; the converse of the above, is denominated death by Asthenia. Signifying privation of power and as applied to the heart Signifies its loss of irritability and consequently the loss of power to contract. There is no want of the proper stimulus from within. but the inability must be attributable to the want of nerve force - or the degenerated condition of its own tissues -

In Autopsies after this mode of death the heart is

found to be filled with blood, upon which it has been made. To contract. The circulation; this case having ceased from want of the exercise of its propelling power—
This form of death's approach is by no means uncommon—
It may be produced by various poisons under the action of which the movements of the heart are speedily arrested— In such cases the heart is said to contain both venous and arterial blood in their proper cavities—
Various diseases also accomplish the extinction of life by this mode— Disease however acting

more slowly than the known material poisons- gradually imparting its toxaemic effects to the blood- when it is carried to the nervous centres and at last reacts upon the muscular fibers of the heart- depriving them of their contractility- and thus the blood is made the common carrier of its own destruction.

The more prominent Symptoms of this mode of death by Asthenia consist in- a feeble frequent pulse, gradually diminishing and ultimately failing altogether- The debility of the muscular system becomes

extreme. The whole surface becomes
paler and paler and the
countenance assumes a death-like sallow-
ness. The senses may remain
perfect or even become abnormally
acute. while the intellect is
generally clear. Towards the close
the sphincters loose their tonicity.
the extremities become cold and
sometimes oedematous. and life seems
gradually to fade away.

In this mode of death the
general system seems to keep pace
with the failing centre upon
which it is dependent for support
until at last the heart itself falters
flutter and its action becomes extinct

death by Anaemia and Asthenia
with one other yet to be mentioned
embrace by far the greater number
of deaths generally met with in
civil and military practice. But
there are certain conditions
producing death more or less
common to both which may
be embraced under the more
general term of Syncope.
which has reperance more
particularly to a state of
suspended animation dependent
upon a sudden cessation
of the circulation and sensibilities.
possibly dependent upon the tonic
contraction or somewhat continued

relaxation of the heart's action and may become the cause of immediate death. While death from Starvation or Inanition may be considered as equally common to both modes - the quantity of blood being gradually reduced for want of supply and the contractile power of the heart failing for want of internal Stimulation and nervous support. ——

And again death may approach by way of the respiratory organs and is then termed Death by Asphyxia or more properly Death by Apnoea. In this instance the parts more

immediately implicated are the Lungs. and air passages leading to them - the muscles by which the action of respiration is carried on and that portion of the nervous System presiding over them

In order that life may exist it is not only necessary that abundant oxygen in the form of Atmospheric air should be present - but also that it should have free access to the minute vesicles of lungs; for there and there only can we expect the blood to become sufficiently

oxygenated to maintain the
internal or Systemic gaseous
circulation among the tissues
of the various organs without which
the continuation of life would
be utterly impossible - It is
also equally necessary that
the blood should pass along
the capillaries of the lungs
in order to receive the oxygen
thus offered by the surrounding
air in the vesicles - Anything
therefore having a tendency
to prevent the air from
passing into the lungs or
to prevent the blood from
receiving its oxygen would be

fatal to the conditions of life and would become a cause of death by Apnoea—

The entrance of air into the lungs may be prevented by a great variety of causes—

Mechanical obstructions such as cause the occlusion of the air passages—pressure upon the chest and abdomen at the same time preventing the movements of the ribs and diaphragm—paralysis or tonic contractions of the muscles of respiration—by disease or injury to the nerves supplying them—or the admittance of

air or fluid into the pleural cavities in sufficient ~~quantity~~ quantity to prevent the expansion or force the compression of the lungs tissue - or infiltration into the lung - would be fatal to life ——

The phenomena attendant upon the sudden or gradual privation of air from the lungs and consequently of oxygen from the tissues are - constantly increasing desire for fresh air and labor to perform the act of true respiration - flushed condition of the face and subchanging of color from red to

purple as the efforts to breathe are more or less successful- and finally- stupor from venous blood in the brain- coldness of the extremities- and a cessation of the efforts to respire

By this mode death may be almost instantaneous as by strangulation, drowning or by breathing an air destitute of oxygen or which does not contain a sufficient quantity of it to sustain life- or by spasmodic closure of the glottis- Or it may approach more gradually as by some of the slower forms of disease. which have a tendency

to the destruction of the lung tissue. or to the closure of the bronchia by the thickening of their lining membrane. The ultimate cause of death in both instances being the same namely the non oxygenation of the blood —

Death, in which the function of the brain is the first to become effected; has received the name of death by Coma. This may be brought about by any cause acting upon the brain in such away as to suspend its action. such as clots of blood from extravasation — pressure from tumors. violent

convulsions and the action of narcotic poisons such as Opium & alcohol.

The difference between death by Coma and death by Apnoea would consist in this that in death by Apnoea the Chemical process by which the blood becomes oxygenated fails first and the action of the brain from the circulation through it of venous blood fails afterwards. Such blood being incompetent to the support of its functional action. whereas in death by Coma the brain is the first to become affected with the supervention of insensibility. the effect is secondarily transmitted to the Chemical process

of respiration through the paralysis of the muscles by which the action is kept up ——

The symptoms of death approaching by coma are such as would arise from the interruption or suspension of the functions of the brain; insensibility more or less complete, loss of voluntary motion while the action of the heart may remain nearly normal for a short time, when it too gradually begins to fail, becoming less frequent and more feeble until at last it entirely fails — and thenceforward the same internal changes occur as in death by drowning. It is

in these forms of death that the difficulty may arise of deciding positively when organic life no longer exists. And so close is the assimilation of a deep state of Coma to true Somatic death that even the most experienced might fail to discriminate between them until decomposition had given unmistakable signs of molecular death. which may first be detected by the sinking in of the cornea and the appearance of bluish tinges upon the abdomen

These are some of the modes of death most commonly met with and which are generally treated of by the authorities. There are

also some other modes men-
tioned of by some writers
among which may be found death
by Necraemia implying a Toxaemic con-
dition of. or more literally death
beginning in the blood- but this
would seem in reality to be
more a cause of disease than mode
of death-

It would appear therefore that death
might begin at the heart- first from
the want of its internal stimulus
and a deficiency of material upon
which to act- and secondly from
want of its external stimulus through
the nerves supplying it to enable it to
contract upon the contained fluid

And also that death may be produced by the failure of the blood to become oxygenated. First by a sudden cutting off of the air from the lungs. the blood continuing to circulate but becoming more and more incompetent to the support of the animal functions and weakening the muscles until it finally stagnates in the capillaries. And secondly by the incapacity, from various causes of the lungs to permit a sufficient quantity of blood to pass through them to supply the demands of the tissues. And lastly from the failure first of the vital organal functions by which respiration is carried on —

All of these modes of death, it is of the first importance, that the medical practitioner should understand. Since to him is entrusted the duty of guarding life from the encroachments of death from whatever quarter it may make its approach.

There is yet one other mode of death, which however is but seldom seen. Since the evils of life are so many and the tendency to immature death so strong, and that is. Death by old age. In this manner the individual seems to sink gently and gradually

into the grave - from the
continued wear and tear of
the vast machinery of his body
Here the order of the approach
of death would seem to be
reversed and instead of
seizing first upon some of
the vital organs within
the external senses first begin
to fail and one by one
become extinct The sight. hearing.
smell. and taste. all cease. until
finally some vital organ gives
way. and the individual -
"Recenes, not suffers death's tremendous blow
And shelters in his hospitable grave"

AN

Inaugural Dissertation

ON

Hydrate of Chloral

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Jno. P. Brawner

Of

Maryland

Session of 1871 – 1872

Hydrate of Chloral

Among the many interesting preparations that attract our notice in Materia Medica as Hypnotic Agents none seem to attract so much attention of the Medical Profession as Hydrate of Chloral. Medical Journals are filled with marvellous reports of its wonderful effects. Physicians wherever it has come under their notice are enthusiastic in its Praise; and many think it equal if not Superior to the long Tried (though much abused) Remedy Opium which has always commanded the General esteem and admiration of the Profession at large for its Superior properties of assuaging pain and indu-

-ing sleep, that Hydrate of Chloral posses
es superior advantages over Opium, as
a pain alleviating and sleep produc
-ing remedy has been fully proven
by the rapidity of its action and subse-
-quent freedom from torpor and disagre
-able sensations, In relieving the suffer
-ings to which Mankind are heir to. Which
duty falls to the lot of the Physician
to minister, he should employ those
remedies with which he is most familiar
and not grasp hold of any remedy
and employ it in a hap hazard man
-ner, without first fully ascertaining
whether its action has been fully estab
-lished by Physiological and Therapeutical
experiments, and even then only by

ing great caution and careful
study, but to our subject. Hydrate of
Chloral was discovered in the year
1832 by Baron Liebig, a highly distin-
guished and celebrated German Chemist
who has and is still adding many
valuable memento's to Chemical Science.
For a long time this valuable and
important Remedy remained on the
shelves of the Chemist Laboratory as a
mere curiosity, and it was not until
May 1869 that its Therapeutic effects
commenced to be studied, although
Baron Liebig first prepared Chloral,
we are chiefly indebted to Liebrich
and Dumas for a Knowledge of
its properties and constitution. The

and by which the resulting compound is purified (Chloral $C_2Cl_3(HO)$) is formed by a prolonged action of Chlorine upon absolute Alcohol, to purify it, the current of Chlorine must be kept up as long as the acid gas continues to escape, and the Product is to be agitated with three times it's volume of Sulphuric acid (SO_3) & gently warming this mixture in a water bath, the impure Chloral separates as an oily liquid, which floats on the surface of the acid, It is purified by distillation from fresh Sulphuric acid and afterwards from a small quantity of Quicklime, which must be completely covered by the liquid until the end of the Operation —

anhydrous Chloral is a thin oily liquid of a peculiar benumbing odor which produces tears and has but little taste. Dr Liebreich says that if Chloral be left in contact with concentrated sulphuric acid that it is converted into Polymeric insoluble Chloral. by warming this insoluble Chloral it is transformed into soluble Chloral the Specific Gravity is 1.502 Boiling point 203 F. by degrees it thickens and sometimes changed suddenly into Chloral, evolving a large amount of heat, When anhydrous Chloral is mixed with Water we obtain in a short time acicular crystals of Hydrate of Chloral. This body is distinguished from the

ordinary chloral by containing one molecule of water, it is represented by $C_2Cl_3HO + H_2O$. Chemically pure Hydrate of Chloral forms white acicular crystals of a peculiar pungent odor and a somewhat bitter taste. It fuses and sublimes readily, and keeps well in glass stoppered bottles. Insoluble in chloroform. Soluble in Water-alcohol, & Ether in all proportions. Incompatible with the alkalies and is not acted upon either by nitrate of Silver or by acids.

It appears that the discovery of chloral by Liebig 1832 was simultaneous with that of Guthrie in this Country in the discovery

of Chloroform, and with Liebreich just coming into notice as a Hypnotic agent, Chloroform has been employed since the Year 1847.

Therapeutical Effects.

Hydrate of Chloral is a Remedy which if not used with caution by the inexperienced, may end in fatal and serious results. Scarcely a week has elapsed during the last Year but that Some News-paper had an account in it, of death from Hydrate of Chloral, but if all such cases were traced to their Origin, it would be found that it was from an

injudicious use of the drug by Parties who were entirely ignorant of its modus operandi. The American People have always been noted as a fast race. and they take hold of anything and Everything without proper forethought, and suffer the consequences therby afterwards. For the Therapeutical effects of this Valuable and interesting Remedy we are indebted for the Knowledge we possess to Drs. Liebrich & Richardson. The theory set forth by Dr. Liebrich is that Hydrate of Chloral coming in contact with the Alkalies of the Blood (the normal State of the Blood being alkaline) Evolves

Chloroform and formic acid in the Human System, and that which takes place outside of the Body in the Chemical Laboratory ought to follow in the Alembic of the Stomach. As said in Biddles Materia Medica fourth edition Page 53. the following. it is asserted that Chloral is decomposed in the blood, with the liberation of Chloroform, but still is scarcely probable, and its effects are certainly not identical with those of Chloroform. Nitrate of Chloral is the most rapid of all known Soporifics in its action. It is and has been employed in maniacal Paroxysms

recommends it in Parturient Women, Surgeon A. M. Adams reported two cases in the Lancet (reprinted in the N. Y. Medical Record for July 1st 1871) one of a delicate Female who was delivered of her first child and 4 days afterwards was attacted with acute ungovernable Puerperal Mania, who was treated with it, after Bromide of Potassium, Opium in large doses and Chloroform, were given without effect, in which complete recovery took Place. The other was a Man laboring under a severe attack of asthma, Previously Chloroform had been given

with only temporary relief. 30 grains of Chloral was given and in 20 minutes a natural sleep was produced which lasted for 3 hours. Prof Chew. our highly esteemed and distinguished Prof. of Materia Medica says that in Delirium Tremens it is the most important Remedy we have, and that it a far more powerful agent for good than either Bromide of Potassium or Opium also that in Phthisis where we find it necessary to use a Narcotic we find it in it a special agent, also that in Typhus and Typhoid fevers it may rank as a first rate restorative by

giving Sleep and rest. It will allay Arterial throbbing or Tension its action does not attain any dangerous effects upon the Heart. The General action may summoned up as follows. it is remedy for inducing Sleep which is particularly applicable in those cases where Opium is contraindicated, it does not like Opium interfere with the Elimination of the Kidneys, While Opium alone can be compared with it, it has its claims of Superiority over it, as its use entails no unpleasant after Symtoms, there's no Headache no Nausea no Anorexia, or constipation, and it Generally in 15 or 20 Minutes

after it is injected Produces a calm tranquil sleep of a profound, during which there is little or no modification perceptible in the temperature - in the regularity of the Pulse or the Respiration after its dejection. The sleep continues for 7 or 8 hours - the waking is not accompanied by Headache or nausea there may be some dullness - but this soon disappears - It can be given either before or after meals without affecting digestion - One caution is necessary in this regard it is not only in Delirium Tremens but in other diseases the first action of Chloral (like that

of an insufficient dose of Chloroform) is exciting rather than Sedative (You must not on that account infer that accounts, that it is acting injuriously, for a second dose will always produce sleep. The dose should always be modified by the age, Health and General Idiosincrasies of the Patient. The dose of Hydrate of Chloral may be given from 5 to 30 grains as the occasion may require, repeated Small dose may cause danger In doses of XL to LX grains profound Anesthesia will be produced, and in consequence of its Chemical Composition it will have to be nearly always confined to solution - Prof."

Chew. recommends the following formula.
℞. Hydrate of Chloral gr. 4x Syr. Orange flowers and water each ℥ß. M.M. Sol. Sig. Dessert spoonful to a Tablespoonfull as required. As the flavor is exceedingly disagreable, it is best to combine it with some corrective such as the Medicated waters or Syrups, for instance, the Aq. Mentha Pip. Cinamoni. Anisi. Syr's Prunus Virginiana. Dolu &c. In Infantill convulsions the dose may range from gr ij to iij.
Dr Liebrich has fully established by Practical Demonstration — an antidote to this Powerfull poison. In case of an over-dose — by the injection of Strychnia — the results of such is that Strychnia cuts short

and destroys the effects of Chloral if administered after an overdose - while producing its own characteristic action. We propose to administer the nitrate of Strychnia in accidents caused by an overdose of Chloral or Chloroform. And further that Chloral will diminish the effects of Strychnia if given promptly after the Exhibition of that Poisonous Alkaloid. We conclude for we have truly to say - that we have endeavored to trace this interesting compound from its discovery up to the present time, and if we have erred in any particular, we are perfectly willing to stand corrected.

John P. Brawner
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By

E. M. B. [illegible]

Of

Mississippi

Session of 1871-2

The Physician and his Duties.

Far back through the dim vista of years we search with restless, scrutinizing gaze for the landmarks and origin of the noble Science and Art of Medicine.

And yet, the light of science dawning on the mystery of Art is of a Comparative recent date. Nothing rewards our care save that assumes complication of myth and fable, gleaned from the numerous traditions of the earliest inhabitants of the world.

We are told in history that medicine, or rather the art of applying remedies to ills, existed from the earliest date, and to the materia medica are assigned the sa

[illegible] Terrors of Antiquity; Afterwards, Coming [illegible] with practical Physics, Anatomy, and Surgery." The two Calles, we conjecture, arose from Casual Observation in the [illegible], and [illegible] of Animals, for food; in causing and [illegible] wounds in Battles or Broils. Some minds are so Constituted that, to [illegible] an incentive to deep research as to its Cause and effects. To such we are probably indebted for the discovery, as well as the perpetuation of our Cause. "Of its earliest History we certainly know nothing," says Miller, "and can only the [illegible] from our knowledge of [illegible]

and their customs." We hear of it first in early Greece; but find nothing reliable even here, as it is all traditionary.

The first practical use of the art is attributed to two classes of people; first, the Chiefs, or sovereigns of communities; and secondly, the priests and ministers of religion. Of the former class, the apparent veneration of the masses for their leaders, would induce the conclusion that all [illegible] able means for inspiring confidence, and mitigating suffering would eagerly be sought and practiced, by those whose chief [illegible] pleasure it was to regard the well being of those under their sway.

Therefore we cannot find a royal person

-age, of ancient history, who was not famed for some skill in medicine and surgery. Among these may be [illegible] Chiron, Esculapius, Machaon, Podalinius, Achilles, and Tencer. There we have the other class, by some denominated the priestly class. As the characteristics of the former class were chiefly surgical, the latter was of a more practical turn. As examples, may be cited Melampus, and Orpheus; the one, acting from mere selfish motives, seeking rather the accomplishment of his own desires, than the welfare of his fellow men; the other, actuated by the same motives if, indeed, he can be considered as [illegible]

longing, at all, to the class. However, some consider them entitled to the place, and we hardly deem it of enough importance to dispute.

All this is extremely vague and unsatisfactory, since its connection with superstition renders those mythological accounts superlatively preternatural and sublimely ridiculous (if we may so express our ideas).

The treated fame of Esculapius, the petition of Plutt, the wrath and sentence of Jove, setting aside the fact that this is all a myth, would provoke a smile of incredulity, if not one of absolute derision.

Our ideas would lead us to place more faith in the ministrations of the old women of ancient days and to accord them rather the honor of first moving in the humane cause.

The Bible, that most authentic of all histories, first mentions them as ministers to human ills. Among those of this, the third class (and of our own coinage), we may place the names of Circe, Helen, and Medea. We will, however, leave this uncertain question and proceed to mention some whom we know to be the real "fathers of medicine".

Thus to Hippocrates let due praise be

sung, he being among the first to assume the task of guiding intelligibly our minds into the labyrinth of science, and pointing our wavering footsteps in the right direction; though not always with truth. Excuses can be well made for his errors, however, as medicine was then struggling for birth. Next was Paracelsus, whom we believe to have made few, if any additions to the discoveries of his predecessors, and who initiated into his system altogether a ridiculous amount of superstition and absurdity. Then comes Hahnemann, with all the grand and glorious paraphernalia of Homeopathy. Here we [illegible]

pass over in silence, as his principles with himself are not recognized by us. For the medical world, we fancy, he did nothing, only leaving behind him, as a reminiscence, a few shallow, bombastic and egotistical assertions, supposed no argument whatever. Therefore we bid adieu to him, and his "Similia similibus mendentur" and devote our time and space to more worthy objects. Broussais next claims our attention. His doctrines are said to have attracted the gaze and admiration of the world. He is considered as the first to have advanced the science of Anatomy, or rather to be the founder of that school. To him

we are under lasting obligations for many valuable acquisitions to our knowledge.

We might occupy much time and space in enumerating like examples, but we will only add a few of the most prominent ones, who have inscribed their names in indelible characters on fame's immortal ~~list~~ roll.

Galen, Sydenham, Ewell, Amarah, Cooper, Lawrence, Velpeau, Dupuytren, Mealey and Walsh of Europe. Hunt, Pancoast, Gross, Stone, and Flint of America, are names which time, in his rapid flight, can never efface from the memories of those who have

merit and appreciate worth.

The science and art of Medicine is very now but in its youth. Ever and anon there bursts forth a flash of scientific skill to astound the world, and advance another step, that cause which we have so learned to love.

The discoveries in Surgery, Materia Medica, Pathology and Therapeutics are of almost daily occurrence. Facts are fast taking the place of theories, and many false notions are giving precedence to new and correct ones, and the cause of Medicine, today, stands forth arrayed in higher altero than was ever begun donned by Science or Art.

The character of the physician is enveloped in a cloud of sublimity, and moral grandeur, which wearies the mind in its [illegible]. [illegible] God holds in his hands the sword of life and death. Should he not thus study his position and responsibility? So soon should he tremble and quake at his power.

What is a noble and a more [illegible]ing thought than that of being able to alleviate suffering, to return to health, strength, and beauty, and who bears the image of Deity?

The characteristics of the physician are numerous, and necessarily highly [illegible]

yet, never can his portrait be too [illegible] produced. [illegible] intellectual, benevolent, and good is centred in him. In the language of Dr Meiggs, the mind and heart of the practitioner should be the shrine of truth and probity; his mind should not deceive itself, and his heart should not suffer itself to be deceived and misled by any earthly temptation, or any passion, from the narrow and rugged way of duty and conscientiousness." His field for philanthropic efforts is vast and extended, and [illegible] it with but the [illegible]

"[illegible]
To aid his skill, and save the ling'ring life;
[illegible]
[illegible]